A decorative border surrounds the central text area. It consists of a double-line rectangular frame. Between the lines, there is a repeating pattern of geometric symbols: a circle with a central dot, a four-pointed star, a triangle with a horizontal line through its center, and a circle with a horizontal line through its center. The pattern is symmetrical and repeats along all four sides of the border.

CLAUDIUS
PTOLEMY

Tetrabiblos
Book I

*Translated
by Robert Schmidt*

*Edited
by Robert Hand*

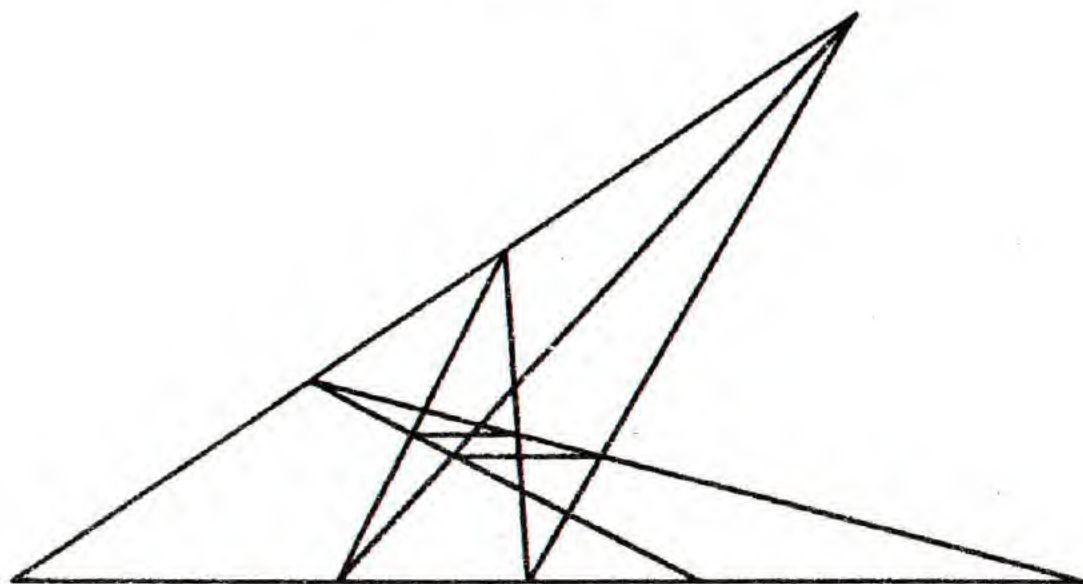
Project Hindsight
Greek Track
Volume V

CLAUDIUS PTOLEMY

**Tetrabiblos
Book I**

*Translated by
Robert Schmidt
Edited by
Robert Hand*

**Project Hindsight
Greek Track
Volume V**



The Golden Hind Press

PROJECT HINDSIGHT is funded entirely
by the astrological community through subscrip-
tions and donations.

©Copyright 1994 by
Robert Schmidt

Published by **The Golden Hind Press**, P.O. Box 002,
Berkeley Springs, WV 25411.

Table of Contents

| | |
|---|-----|
| Introduction to Ptolemy's Tetrabiblos by Robert Hand | i |
| Translator's Preface by Robert Schmidt | vii |
| General Note | x |
| <i>Oikeiōsis</i> & <i>Sunoikeiōsis</i> & corresponding verbal forms . | x |
| <i>Schēmatismos</i> | xi |
| The Tetrabiblos, Book I | 1 |
| 1. Introduction | 1 |
| 2. That the Knowledge Through Astronomy Is Attainable, and to What Extent | 3 |
| 3. That It Is Also Beneficial | 9 |
| 4. Concerning the Power of the Wandering Stars | 14 |
| 5. Concerning Benefic and Malefic Planets | 16 |
| 6. Concerning Masculine and Feminine Planets | 16 |
| 7. Concerning Diurnal and Nocturnal Planets | 17 |
| 8. Concerning the Power of the Figurations Relative to the Sun | 18 |
| 9. Concerning the Power of the Fixed Stars | 20 |
| Concerning the Formations farther north than the Zodiac | 22 |
| Concerning the Formations farther south than the Zodiac | 23 |
| 10. Concerning the Seasons of the Year | 24 |
| 11. Concerning the Power of the Four Angles | 25 |
| 12. Concerning Tropical, Equipartite, Solid, and Bicorporeal <i>Zōidia</i> | 27 |
| 13. Concerning Masculine and Feminine <i>Zōidia</i> | 28 |
| 14. Concerning the Twelfth-Parts that Are Configured | 29 |
| 15. Concerning <i>Zōidia</i> that Command and in Like Manner Obey | 30 |
| 16. Concerning <i>Zōidia</i> that See and Are Equipollent to Each Other | 31 |
| 17. Concerning Unconnected <i>Zōidia</i> | 31 |
| 18. Concerning the Houses of Each Star | 32 |
| 19. Concerning Trigons | 33 |
| 20. Concerning Exaltations | 37 |
| 21. Concerning the Disposition of the Boundaries | 38 |
| 22. Concerning Places and Degrees of Each <i>Zōidion</i> | 45 |

23. Concerning Faces, Chariots, and the Like. 46

24. Concerning Applications and Separations and the Other Powers
..... 48

Appendix I

Ptolemy's Hypotheses of the Planets

Book II 50

Appendix II

Translation Conventions 58

Introduction to Ptolemy's *Tetrabiblos*

by
Robert Hand

Ptolemy's *Tetrabiblos* is without doubt the single most influential book in all of Western Astrology. Its effect upon astrology is as great as Isaac Newton's *Principia* on Physics. On several occasions in the history of Western Astrology the study of the subject has been entirely transformed by the efforts of reformers to bring astrology back to what they saw as the "pure" astrology represented in this book. Rightly or wrongly, the reformers thought that astrology had started with Ptolemy and then been "corrupted" by later astrologers, most especially the Arabic astrologers of the Middle Ages.

Yet as we have already seen in the previous volumes of Project Hindsight, Ptolemy did not invent Western Astrology; he did not represent the mainstream of astrological practice; nor, influential as his book was, was he the single strongest influence on the technical practice of astrology.¹ It is even widely maintained that Ptolemy was not a practicing astrologer. So why, we have the right to ask, was his work so influential?

There are several factors that led to this. First of all we have to realize that Ptolemy had as much influence on astrology as Newton on Physics partly because in many ways Ptolemy was as great a figure in the history of science as Newton. He was not as innovative as Newton or in some ways as insightful, but far more than Newton he was the creator of a synthesis that brought together the understanding of *all* nature into a single whole. Aristotle provided the philosophical basis for what Ptolemy did, but Ptolemy worked out the details, especially in the sublunary sphere.

Modern historians remember Ptolemy as the author of the *Almagest*². A few will grudgingly admit that he also wrote a work on

¹ Of the earliest astrologers whom we can name, that distinction probably must go to Dorotheus of Sidon who was clearly the strongest single influence on Arabic astrology and consequently on medieval and renaissance astrology. Much of the "purging of Arabic influences" that went on in the Renaissance was actually a purging of Dorothean practices.

² This title is actually a corruption of the Arabic *Al Megiste*, which simply means the "the greatest."

astrology. But most people are unaware that he also wrote a *Geography*, a *Harmonics*, an *Optics*, the *Hypothesis of the Planets*¹, the *Phases of the Fixed Stars* and various smaller works. Robert Schmidt's studies of these works indicate that they all make a complete whole, a massive study of almost every aspect of the physical and, through astrology, even the psychological worlds. I am unaware of such a massive synthesis having been attempted by anyone else in history.

We cannot let the fact that his ideas have been superseded in almost every area about which he wrote obscure our appreciation of the awesome scale of what he attempted. He was in many ways the greatest scientist of the ancient world even if there are others of that time whose work has held up better in the face of modern revisionism. Imagine what an effect it would have had on astrology if Newton *had* written a treatise on astrology. I think the reader can also imagine how Newton's astrology would have affected the reception of the ideas and methods of lesser astrologers writing at the same time. Even where a Newton might have been out of touch with the methods of practical astrology and put forth ideas that were theoretically sound but practically useless,² his ideas would have triumphed over those of the lesser lights simply on the basis of his prestige overall.

Something like this happened with Ptolemy. He was an astrologer. I think we can believe that. But I think that we can also assume that he was more of a theoretician than a practicing astrologer³ as we would understand it. Schmidt is also of the opinion that astrology played a central role in Ptolemy's synthesis, a position with which I concur. Astrology for Ptolemy was the connecting link between the greater cosmos, macrocosm if you will, the sublunary sphere and humanity. But that does not mean that Ptolemy was especially concerned with the day to day issues of chart interpretation.

Ptolemy's practical astrology is actually a bit on the crude side.

¹ A portion of which appears in an appendix to this work.

² Which is not to imply that I believe that Ptolemy's hypotheses are theoretically useless.

³ As examples of high level practicing astrologers we can mention Thrasyllus who was the astrologer for the Emperor Tiberius and Babillus who worked for several of his successors. Both were regarded as very learned and wise men, not street corner Chaldeans, and both clearly did practical work under very demanding circumstances.

Houses are referred to at most minimally. Otherwise why would astrologers have so long debated what house system Ptolemy used? Aspects appear to be from sign to sign, something not unusual in Greek practice, but Ptolemy is not very clear about this. House rulership, an important tool for most of his contemporaries, does not appear prominently, but it does appear, almost always in the form of the Almuten, i.e., the planet having the most dignities in a given location. Then there are other areas where Ptolemy clearly has a very well worked out technical corpus, but it is described almost as if it were incidental. I believe it is quite clear that Ptolemy is not primarily concerned with teaching all of astrology. Yet it is also quite clear that he had a considerable mastery of the subject. All of this leads to an important fact. Ptolemy's *Tetrabiblos* cannot, should not and was probably not intended to be a canon for what is and is not legitimate in astrology! However, having said this, I must also note an exception. There are clearly some things that Ptolemy did not approve of and did intend to debunk. For example horary and electional astrology do not meet with his approval.¹ There was no way that Ptolemy could make these forms of astrology fit in with his natural philosophy. Other widely used techniques of natal astrology were rejected for similar reasons.²

With all of this is Ptolemy important for us? The answer is yes. Whatever the deficiencies of the *Tetrabiblos* may be as a practical astrology text, it is the best example of an astrology based on a coherent natural philosophy that there is. If we are ever to generate a theory of astrology, we must closely examine Ptolemy. If the details of his natural philosophy have been rendered obsolete by modern science, there is, I believe much that can be salvaged by appropriate revisions. For example, and I plan to work this out in greater detail in future writings, I believe that Ptolemy shows us the foundation for a study of cycles and their affects that could revolutionize our understanding of astrology. For in Ptolemy, as in many other Greek authors, we see a quality that is lost in modern thinking, the close relationship between mathematical abstraction and human experience. His use of the four primary qualities shows that they are phases in cycles, and at the same time they are qualities that we can experience.

¹ See section 2 of Book I.

² These include decanic faces, *monomoiria*, *dōdekatēmoría* and other smaller harmonic divisions.

We also need to study Ptolemy to find out what he really said, because of his enormous influence. All of the very influential work of Placidus was nothing more than an attempt to interpret Ptolemy's murkier passages. Every word and every line of the *Tetrabiblos* has been scrutinized in both the original Greek and translations as well as translations of translations. In fact most of our knowledge of Ptolemy comes from what amounts to translations of a translation. The popular Ashmand translation, the first reasonably decent translation of Ptolemy into English, was a translation of the Proclus paraphrase of the *Tetrabiblos* and relied heavily on Latin translations as well as the "original Greek" of the paraphrase. The so-called Proclus paraphrase¹ was itself a kind of translation. The original Greek of Ptolemy was quite complex and rhetorical.² By the Byzantine period changes in Greek had made it sufficiently difficult reading so that someone wrote a paraphrase in simpler Greek which was attributed to Proclus. By the time of Ashmand the Proclus paraphrase was widely regarded as superior to the original text of Ptolemy. This probably only means that it was clearer to most readers of Greek than Ptolemy's text. A great deal of the material attributed to Ptolemy seems actually to be the result of misunderstandings based on the Proclus paraphrase or various Latin translations. It is not at all clear, for example, that Placidus had access to anything but a Latin translation of the Proclus paraphrase.

Finally in the 20th Century we have the Robbins translation, based on Ptolemy's text, not the paraphrase. Widely regarded as the proper scholarly academic translation Robbins translation is as far off the beam as anything that preceded him and has already caused some misunderstandings in modern astrology. The **Translator's Preface** by Robert Schmidt goes into the problems with Robbins' translation at some length.

All of these difficulties with previous texts and translations have led us to do this new translation. In fact the whole of Project Hindsight started out because of a desire to do a retranslation of Ptolemy. In this translation by Robert Schmidt the overriding goal is an accurate rendering of the original text. The technical terms have all been translated one to one, that is, every Greek term and every variation of

¹ It is almost certainly not the work of Proclus, but of a Byzantine writer of several hundred years later.

² See Translator's Preface.

every Greek term has been translated where possible into its nearest English equivalent so that there is one and only one English word for every Greek word. Exceptions are recorded in the notes. Previous translations have tended to lump together different Greek words under single English words resulting in the obscuring of distinctions that Ptolemy was in fact making.

In addition this is the first English translation of Ptolemy's original text that is aimed at the concerns of astrologers. Robbins could not have cared less about astrology and this led to some very basic sloppiness on his part. This is also the first English translation based on the definitive Boer edition of the *Tetrabiblos* published by Teubner. Robbins assembled an edition of the text based on what was available to him. The Boer edition is based on a much more comprehensive examination of the surviving manuscripts. The result is that some very serious problems have been cleared up.

To take one example, the tables of the terms that Ptolemy claimed to have found in an old manuscript, the so-called Ptolemaic terms, used by Lilly et al.,¹ are badly garbled by Robbins or the versions of the text that he had access to. Ashmand presents the correct terms, but mixed in with several variants with no distinction between the variants and the actual ones. In fact it is not clear that either he or Wilson² knew which were which. No wonder the use of terms (or boundaries as we have been calling them) has declined in modern astrology!

We need to do two things with regard to Ptolemy. First of all we need to recognize him for everything he did. Therefore we need to have the most accurate possible rendition of what he did. He was a towering figure in his time and in the history of astrology whose prestige did much to legitimize astrology throughout history. In fact the decline in astrology's prestige came about in part directly as a result of the decline of Ptolemy's prestige. Ptolemy, flaws and all, can serve as a paradigm for the ways in which a true science (as opposed to craft) of astrology could be created.

Second we need to recognize that Ptolemy is only one of the major astrologers of the ancient world who shaped the Western Astrological

¹ It turns out that Lilly's rendition of Ptolemy's terms is very close to correct. See the notes for section 21 of Book I.

² James Wilson of the *Dictionary of Astrology* also did a translation of the Proclus paraphrase which remains rightfully obscure.

tradition. He cannot serve as a canon of astrological truth with regard to the teachings of other astrologers, but he can serve as a canon of truth for evaluating ideas that are supposedly derived *from* him. We hope that this translation will help astrologers in getting to exactly what Ptolemy said.

Final note: Except in this introduction, all of the notes that follow are those of Robert Schmidt, the translator, unless they are marked with the initials [RH]. Those are notes by your editor.

Translator's Preface

by

Robert Schmidt

Why have we chosen to retranslate Ptolemy's *Tetrabiblos*? Fair question! The obvious answer is: for several reasons. First of all, of the two relatively modern and fairly accessible English translations, the one by Ashmand was not made from the text of the *Tetrabiblos* itself, but rather from a Greek paraphrase of it often attributed to Proclus. Although this paraphrase seems to be interesting in places, it deviates significantly—and in Ashmand's translation of it, often wildly—from Ptolemy's own work. Furthermore, I suspect that Ashmand was highly influenced by Latin translations of the paraphrase, which already belong to the tradition of misinterpretation.

Robbins' Greek text is admittedly compiled from a somewhat incomplete selection of manuscripts. That, however, does not automatically make it inferior. But we were somewhat surprisingly able to establish the probable superiority of the Teubner text edited by Boll and Boer in 1940. There is a significant difference in the order and numerical values of the Ptolemaic boundaries (traditionally called "terms") between these two texts. By a very careful translation of Ptolemy's own description of his table, we were able to show the complete agreement of the *Teubner* text with Ptolemy's stated principles of assignment. This gives us considerable confidence in their text. And even though most of the differences between these two texts are insignificant, there are a few more places where it seems to be highly important, particularly if we keep in mind that in translating Ptolemy, every word counts.

The second reason for this new translation has to do with the existing translations themselves. We have already ruled out Ashmand's for the reasons stated. Robbins' translation is in a certain sense worse. Let us state flatly at the outset that it is not even good as a guide to reading the Greek text (which is all the Loeb Classic Library translations often claim to be). It abounds in errors in almost every paragraph and at every level, from the merely grammatical to the conceptually anachronistic. Some are certainly due to the extreme difficulty of the text, for which I am extremely sympathetic. Others may be due to simple carelessness, which is irritating and surprising to discover, but something that can at least be forgiven. However, the

worst errors result from his condescending and judgmental attitude toward what he is translating, which blinds him to the true conceptual issues involved and permits him to give complex and subtle arguments short shrift. If he has that attitude, then he has no business doing the translation—he can only muddy the waters.

Thus, we have felt obliged to do a fair amount of Robbins' bashing in our footnotes. Although we have only cited a representative sampling of his errors, we could point to scores of others. Our intention in these footnotes is not only to justify this new translation, but also to alert those who may already have formed an opinion about various matters on the basis of his translation, as well as any who may have been taken in by its air of academic respectability. Having established this point, we hope to discontinue this practice in our upcoming translations of the remaining books of the *Tetrabiblos*.

Incidentally, we do not claim that the translation offered here is impeccable. It has been done under the somewhat brutal monthly requirements of the project. But we have made an honest effort to deal with the grammar and complexities of argumentation throughout. We have not tried to make the text seem easier or more accessible than it really is. (It was evidently difficult even for Greek speaking scholars, if the Proclus paraphrase is any indication.) But the good news is that Ptolemy's writing really does make sense ultimately. It may be slow going at first, but it always pays off in the end.

Our first and major task has been to lay bare the structure of Ptolemy's reasoning. In order to do this, we have had to contend with *The Ptolemaic Sentence*, which is something truly awesome to behold. (I have often said that Ptolemy's ideal book would consist of a single sentence!) *The Ptolemaic Sentence* is the translator's agony and ecstasy. Because the Greek language readily admits of nesting phrases inside of phrases inside of phrases, and because it possesses a huge number of "particles" that allows it to do in writing what we can only do with verbal emphasis, it is possible for the Greek writer to indulge in a truly non-linear yet highly rigorous style of logical and rhetorical reasoning. And against the background of this complex but very secure grammatical structure, he can carry off yet a second level of inference, speculation, suggestion, and subtext without explicitly drawing attention to it. This he does by varying the wording in parallel or oblique constructions, varying the constructions themselves in parallel or antithetical arguments, and varying the arguments in preview,

recapitulations, and hierarchical developments.

Ptolemy does this to an extent I have never before encountered in any Greek writer. It is just that it does not always come off very well in English! In the revised edition of this translation we will certainly spare no efforts to make the translation more readable than it now is. But it is never going to sound like Hemmingway.

The third reason for a new and highly literal translation concerns Ptolemy's extensive reconceptualization and reorganization of the tradition. It is quite evident that the first order of his business is to translate all the dominant astrological concepts from the tradition into the language of Aristotelian natural philosophy. Viewed without the usual modern condescension, this is certainly a tour de force. At the risk of sounding a bit anachronistic myself, I might say that he interprets them all as "functions" of the four primary "arguments" hot, cold, wet, dry. And strangely enough, the astrological concepts do admit of such interpretation to a surprising extent, and without inconsistency. (Consider the dignities, for example.) Since the Aristotelian doctrine of the primary qualities has a high degree of logical coherence (quite apart from the question of its validity) the considerable success of this reconceptualization argues strongly for the internal consistency and adequacy of astrological thinking.

But what about the few remaining concepts that do not admit of such a direct interpretation? It is often said that Ptolemy eviscerated the astrological tradition in the attempt to make it scientific. This may be so. However it may be more accurate to say that he sorted out the concepts of the tradition in accordance with his commitment to the Aristotelian natural philosophy, interpreting most of them "objectively" as we said above, but distributing as many of the remainder as he could into different levels of our experience, but always in terms of those four primary qualities. Some of them turn out to be interpretable in terms of our subjective experience of the primary qualities ("solid" signs, for example); others in more metaphorical and subtly suggestive ways, sometimes only in a passing but significant mention (*cf.* the odd passing reference to 'face,' for example), at other times only in terms of an exploration of the root meanings of the verbs associated with them. Thus, even if some of the concepts do not belong to the astrological doctrine *per se*, they at least belong to an astrological way of thinking.

Some might regard this as so much sophistry or ad hoc reasoning. However, I think it intensifies the argument in favor of an overall

consistency in astrological thinking. This hypothesis can only be fully explored on the basis of an uncompromisingly accurate and literal translation.

General Note

Oikeiōsis & *Sunoikeiōsis* & corresponding verbal forms: These two words are an important part of Ptolemy's astrological vocabulary and consequently of that of later astrologers as well. And they are just as maddening as the other astrological terms we have discussed from the beginning of this project. The problem here is that *oikeiōsis* has an active and a passive side. Related to the common astrological term *oikeios* meaning 'house,' this abstract noun can mean 'to appropriate' something and 'to make it kin;' or else, 'to have an affinity' for something and 'to be attracted' to it. In addition to the active and passive voices, the Greek language has a frequently used "middle" voice, in which a subject performs an act on himself, by means of his own resources, in his own interest, or in some other manner with reference to himself. (Incidentally, it is even thought that the passive voice developed out of the middle.) This voice is very difficult for us to reexperience directly, but it is possible that the present word, as well as many of the equivocal Greek words we have been describing in our translations, are not just internally contradictory, but have their immediate unity in this "middle" realm so characteristic of Greek thinking.

This term is usually employed to describe some relationship of kinship between members of the same genus; that is, between signs or between planets, but not usually (by Ptolemy at least) between planet and sign. In this latter circumstance the prefix *sun* is added to produce *sunoikeiōsis*. It seems to have the general meaning of 'being bound in kinship.' It is almost always the case that the planet is said to have such an *sunoikeiōsis* in relation to a sign. This seems to convey the idea of dependency of the planet on the sign, as if it were being 'adopted' by it.

Oikeiōsis was traditionally translated as 'familiarity' in Latin, which was a semantically compatible translation for that language. However, 'familiarity' has pretty much degenerated into 'acquaintance' in English. We have not yet decided on a regular translation for it, but have decided to experiment with several possibilities in this translation. We

will try using various noun and verb forms of ‘kin,’ ‘familiar’ (to see if the word can be rehabilitated), ‘congenial,’ etc., always noting the usage.

We may have had a little better luck with *sunoiheiōsis* as ‘affiliation,’ which seems to be in the same general semantic field and can be made to convey a mild form of dependency. However, we are by no means committed to this word as of yet.

Schēmatismos: This seems to be Ptolemy's preferred word for aspect. In the General Note to our translation of Paulus's *Introductory Matters*, we discussed the word *schēma*, also frequently used by Greek astrologers for aspect, and translated literally by us as ‘figure.’ However, Ptolemy's form of this root is a little more abstract and conveys the idea of ‘figuration.’ After seeing how he regarded the coordination of the planets in the *Hypotheses of the Planets* (see appendix), it occurred to us that he may have in mind not just the angular shape created by the positions of two bodies, but more the “attitude” or “bearing” that one planet assumes relative to the other through an internal impulse of its own. It may be like the “figures” or “figurations” assumed by the performers of a dance. In any case, we have consistently translated it by “figuration” to keep it distinct from *schēma* (‘figure’).

Schēmatismos seems be the general expression referring to the “figurations” that a body can have to another body, or to a place in the zodiac, or to the horizon of the earth. The prefix *sun* is added mostly when Ptolemy wishes to restrict the meaning to the “figuration” that one planet assumes in relation to another planet. We have thus consistently translated *suschēmatismos* as ‘configuration.’

The Tetrabiblos, Book I

1. Introduction

Of the matters that prepare the goal of prognostication through astronomy,¹ O Syrus, the greatest and most authoritative are two. One

¹ This phrase has been translated quite literally. Robbins has here "Of the means of prediction through astronomy." Later on in the passage Robbins tries to equate the first of these means with astronomy proper as presented in the *Almagest*, and the second with astrology itself, and this has been the traditional interpretation. However, apart from the fact that it should seem rather illogical to think of astronomy itself as one of the methods of prediction through astronomy, the beginning of Book II also distinguishes the two major parts of the prognostic art, and they turn out to be universal and genethliological astrology, not astronomy and astrology. The simplest way of maintaining systematic consistency here is to regard astronomy and the material discussed in Book I of the *Tetrabiblos* not as the two major divisions of the prognostic art, but as *preparatory* to the prognostic art itself. This is in fact exactly the sense of the verb *paraskeuazō* used in this sentence. It is worth noting that Ashmand translated this opening as "The studies preliminary to astronomical prognostication. . ."

Misreadings of this passage may also be the source of the recurrent notion that for the Greeks astronomy and astrology were originally one, or else sister sciences, or something of that sort. According to the present passage they are not. The two studies preparatory to the study of astrology are astronomy proper and the subject matter of Book I of the *Tetrabiblos*, which is not astrology either, but rather an ingenious application of Aristotelian natural philosophy. The major divisions of astrology itself are universal and genethliological astrology, and the study of these does not begin until Book II of the *Tetrabiblos*.

Nor is the relationship between astronomy and astrology one of pure vs. applied, or theoretical vs. practical. The prognostic discipline does in fact *use* astronomy, but it also uses Book I of the *Tetrabiblos*. In either case, this mere use does not constitute one of the said relationships. In fact, in the Aristotelian/Ptolemaic scheme of things, it would seem that Book I of the *Tetrabiblos* is in fact the applied version of astronomical science in as much as the formal celestial configurations studied in astronomy are there endowed with material qualities, or rather qualities capable of effecting change in the material world. (We caution the reader that the subalternation of the sciences, and the distinction between theoretical and practical, had a totally different meaning

is first both in order and in power, according to which we apprehend when the figurations¹ of the motions of the sun, moon, and stars occur relative to each other and to the earth; the other is second [in order and in power], according to which we investigate the changes in that which is encompassed by these figures, as produced by the individual physical characteristics² of these figures themselves. Now the first, which has its own theory and is intelligible by itself even if the goal arising from its combination with the second should not be accomplished, has been systematically covered for you in its own treatise³ in the most demonstrative manner possible. At the present time, we will give an account of the second matter, which is not self-sufficient like the first. We will do this in a manner that is consonant with philosophy, and also in such a way that he who subjects himself to a truth-loving aim may neither compare the graspings⁴ of the second with the ever-holding firmness of the first, not pretending to be able to discern that part of material quality⁵ which is faint and inscrutable in many things, nor yet

within Aristotelian thinking than it does today.) [Additional by RH] All of this is not to imply that there was the kind of gulf between astrology and astronomy either socially, scientifically or logically that there is today.

¹ 'Figurations' as used in this text means roughly the same thing as aspects in common astrological terminology, as it has throughout this series of translations. See the translator's **General Note**. [RH]

² *idiotropia*. Literally, it would mean something like 'with its own quality of turning.' Although this is a fairly common, general term for the specific characteristics belonging to a body, it is hard to think that it did not have some further significance for Ptolemy and astrologers generally, because the special characteristics in question are the productive powers of the celestial bodies and their configurations—that is, the ones that give a special turn to the atmosphere and thus have influence in the sublunary sphere (*cf.* the beginning of the next section).

³ We should perhaps be cautious about identifying this treatise with the *Almagest*. Nearly all of Ptolemy's treatises with specific astronomical content were addressed to Syrus, and the Greek word for 'treatise,' that is *suntaxis*, could apply to any one of them.

⁴ *katalēpsis*.

⁵ Here we are referring to the realm of the material, as opposed to formal cause. This does not allow the kind of definition and clarity that formal causes allow. *Cf.* Aristotle's *Metaphysics*, Book I, where he discusses the four types of cause. [RH]

shying away from such investigation that material quality *does* admit of, since most occurrences, and the most whole ones, do so clearly exhibit a cause from the surrounding heavens.

And since everything that has a nature hard for the multitude to attain is readily impugned, and with regard to the two modes of apprehending,¹ the allegations against the first could only come from the blind, while those against the second have plausible grounds (for either the difficulty of several matters occasioned the opinion that the second was completely incomprehensible, or else the difficulty of taking precautions against what is known [to be forthcoming] disparaged even the goal as useless) we will try, before the explanation of particulars, to investigate in a few words the measure of the both the possibility and the usefulness of such foreknowledge.

2. That the Knowledge Through Astronomy Is Attainable, and to What Extent

It will be quite clear to everyone through a few explanations that a certain power is spread about from the etheric and eternal nature² and reaches to the entire and wholly mutable region around the earth, with the primary sublunar elements, fire and air, being surrounded and turned³ by motions in the region of the ether, while they surround and turn everything else along with themselves, earth and water and the plants and animals within them.

For, through his annual seasonal changes, the Sun, along with the

¹ i.e., the modes of knowing described above. [RH]

² above the Moon. [RH]

³ Although Robbins has the more general word 'changed' here, we think our translation is appropriate. As is evident in Ptolemy's work *On the Hypotheses of the Planets* (see Appendix I), the influence of the ether upon the mundane world is through the actual transmission of motion by contact. It is the peculiar property of the ether to move in perfect circles, not just around the earth but around any other center as well. For example, the ethereal epicyclic sphere rotates around its deferent circle as a center. And when a revolving etheric body is in contact with the air and fire masses, it tends to make them move in circles as well. This whole view is very "materialistic," although not "mechanistic," since the planets move by their own volition.

environing atmosphere,¹ is always somehow disposing everything in the earthly environment for the generation of animals, the fruit-bearing of plants, the flowing of waters, and the changing back² of bodies; not only this, but through his daily revolutions he also disposes everything in the earthly environment for heating, moistening, drying, and cooling, in an orderly manner and in accordance with the like³ figures that are made relative to our zenith.⁴

And the Moon distributes her effluence to us, this effluence being greatest in the direction of the earth since the Moon is nearest the earth, though most inanimate and animate things are sympathetic to her and change along with her, the rivers increasing and decreasing their flow with her light, while the seas curb their own onrush with her risings and settings, and plants and animals either in whole or in part wax or wane long with her.

And the transits of the fixed and wandering stars give most conspicuous indications for the environing atmosphere, which are burning, windy, and snowy, by which the things on the earth are also suitably disposed.

And their configurations with each other—since up to that time the distributions⁵ are in a certain sense assembling and commingling—bring to completion changes that are extreme and diverse, the power of the Sun predominating for the universal part of the quality being ordered, while the remaining stars cooperate or inhibit according to the particular, the Moon more conspicuously and more continuously as she does in synodic moons⁶ or half-moons or whole moons, while the stars

¹ *to periechon*. Literally “that which contains or surrounds”, is also used as a word for “atmosphere.” This our replacement for the usual translation, “ambient,” which obscures the natural philosophy which at the root of this. Ambient is unnecessarily amorphous. [RH]

² *metatropē*. Phenomena such as seasonal color changes?

³ *homoiotropos*.

⁴ Literally, ‘the place at the summit.’

⁵ *diadōsis*. This refers to some kind of propagation that goes down from the planets to the sublunary sphere and mixes there. Ptolemy seems to be leaving it purposely undefined and anything that we do here to define it will be a departure from Ptolemy. The reader is referred to the appendix containing a portion of Ptolemy’s *Hypotheses*.

⁶ new moons. [RH]

more at regular periods¹ and more unnoticeably, as they do in their appearances and concealments and inclinations.²

But when things are viewed in this way, it would seem to all to follow that not only is it necessary for what was hitherto commingled to be somehow disposed by the motion of these stars, but it is also necessary that the germination and maturity of the seeds be formed and shaped in relation to the appropriate quality of the environing atmosphere at that time. The more observant farmers and herdsmen, at least, conjecture the quality of the issue from the winds that occur at breeding or at sowing of seed. And on the whole, we see that the things which are broadly indicated by the more conspicuous configurations of Sun and Moon and stars can be wholly foreknown even by those who do not inquire in manner of physical inquiry,³ but merely by observation—the things which are from a greater power and a more fundamental order, such as the differences of the seasons and of the winds (for the cause of these things is wholly the Sun), even by those who are altogether ignorant; what is more, even by some of the non-rational animals. But the things that are less so can be foreknown by those who are already by necessity accustomed to observation, as the particular indications of the storms and winds which are made more regularly by the configurations of the Moon and the fixed stars relative to the Sun are foreknown by sailors. Yet, because they are not able to know accurately the times and places of these configurations owing to a lack of training, nor are they able to know the periods of the wandering stars as fully as possible and the times when these stars themselves contribute, it happens that they are often mistaken.

If, then, one has come to a precise understanding of the motions of all the stars and the Sun and the Moon, so that neither the place nor the time of any of their figurations should escape his notice, while having discerned [all] their natures by means of the continuous inquiry from still earlier times—even if not their underlying natures *per se*, but only their natural productive capacities (for example, that it is the nature of the Sun to heat and the nature of the Moon to moisten and similarly with the remainder of the stars)—and if for such entities he is competent to determine the qualitative characteristic resulting from the

¹ as opposed to continuously. [RH]

² *prosneusis*.

³ in other words like an ancient physicist. [RH]

commixture of all of them, what is to prevent him from being able to tell on each given occasion the specific characteristic of the environing atmosphere from the state of the phenomena at that time, for example, that it will be warmer or wetter? And what is to prevent him from also knowing for each individual man the general quality of his individual commixture from the environing atmosphere at his formation, for example, that his body is such and such, his soul such and such? And from knowing the occurrences chronologically, because such and such an environing atmosphere is commensurable with such and such a commixture, or even becomes conducive to prosperity, while some other one is incommensurable and conducive to affliction?

So the possibility of such knowledge can certainly be seen through these and similar matters. In what follows, we would consider that such knowledge has come under the charge of impossibility in a plausible but not a fitting manner. For firstly, the mistakes—albeit many, as in a great and many-sided study—of those who do not understand the work precisely have occasioned an opinion that even those things which prove true are due to luck. But this is incorrect; for, such is not an inability of the science but rather of those who handle it.

Then also, the majority, claiming validity in the name of this art for another one whose purpose is finding,¹ deceive the ignorant by seeming to foretell many things even about those matters that *do not* possess any nature at all subject to prognostication; while to the more inquisitive they equally provide an occasion for forming a judgment against those things that *do* have a nature subject to prophecy. This is not as it ought to be; for, one need not confute a philosophy when some of those pretending to it are exposed as charlatans.

But for all that, it is clear that even if someone should approach the astrological sciences² as searchingly and as legitimately as possible, it

¹ *tou porizein heneken*. This may refer to horary astrology as an art of discovery. In Greek geometry, this verb meant to furnish something which was already present but merely needed to be found. Robbins has 'for the sake of gain,' which we think is incorrect. He also, following Cardano, connects this other art with the numerous other mantic arts. However, the objects of these other arts are still intrinsically subject to prognostication, so we do not see how they can be intended in this passage. However, preexistent things, which are often the object of horary, are not intrinsically subject to prognostication *per se*.

² *mathemata*.

is possible for him to stumble, not because of any of the reasons mentioned, but because of the nature of the subject itself and his weakness in relation to the grandeur of his calling. For in general, besides the fact that every study concerning the quality of matter is conjectural and not affirmative, and especially one that is blended from many dissimilars, it is furthermore the case that configurations of the wandering stars can arise that resemble more or less closely the ancient configurations (from which we adapt the prognostications observed for them by our predecessors to the configurations that obtain for the present), and these for long periods of time. But they are by no means without variations, since a collective recurrence of all the bodies with exactness in the heavens and with the earth¹—unless one should hold a vain opinion concerning the apprehension and comprehension of the ungraspable—is completed either not at all, or at least not within a span of time perceptible² to a man, so that for this reason predictions sometimes fail owing to the dissimilarity of the underlying examples.

Concerning the investigation, then, of the occurrences that take place in the environing atmosphere, this alone would be the difficulty since in this case no cause is taken into account along with the motion of the heavens. But concerning genethliological investigations, and in general those about the individual cause of each commixture, the contributing causes and those which arise from the specific characteristic of the things being combined are seen to be neither small nor arbitrary.

For, the differences of seed are most potent in relation to the specific characteristic³ of the genus, since indeed if the environing atmosphere and the horizon are assumed to be the same, each of the seeds prevails in regard to fully impressing its appropriate universal shape, for example, a man and a horse and others.⁴ The places of birth,

¹ Robbins' translation has the earth moving here!

² The quality of being perceptible can be predicated of a length of time here because for the Greeks time *was* the motion of the heavens, which can be perceived.

³ *to idion*.

⁴ This section enumerates the other factors, besides celestial ones that can effect the development of something or someone. The first of these is the 'seed' which roughly corresponds to what we would call genetic potential. 'Seed' here is not restricted to plant seeds, is a general term for that which controls the

too, cause no small variations in the things which are being combined. For, with the seeds being assumed to be the same also according to genus (human, for example), and with the state of the environing atmosphere the same, those who are born differ much both in body and in soul as a result of the difference in the regions.¹ In addition to these, with all the above being assumed as indistinguishable, rearing and habit contribute something toward the particular course of life.² Unless each of these things is distinctly taken together with the causes from the environing atmosphere, even if it be the case that this certainly has the greatest power (since the environing atmosphere becomes a contributing cause for those very things being what they are, while they in no way cause it),³ they can furnish a great impasse for those who believe that everything in such cases can be recognized from the motion of the things in heaven alone, even those which are not entirely its responsibility.

With these things being so, it would not be fitting to abolish the whole of [this prognostic art] for the reason that such foreknowledge may at times miss the mark (just as we do not reject the pilot's art because it often trips up), but as with great promises, and so also in divine ones, one must be content to welcome and believe what is possible. Nor again would it be fitting for us as humans to require that everything issuing from it hit the mark, but rather to join in appreciating its beauty, even in those matters where it was not its responsibility to supply all. And just as we do not fault physicians for speaking both about the illness and the specific characteristics of the patient when they examine someone, so also here it is not fitting to be vexed with those who take for granted race, country, and rearing, or anything else that has already occurred.

development of an organism. [RH]

¹ The second non-astrological factor is the place of birth as a region of the earth with its own climate, cultural conditions and so forth. [RH]

² The third factor is the nature of the environment in which one is reared. This is not, in other words, a system of complete astrological determinism. [RH]

³ The factors listed above, which must be taken into consideration with astrological effects, are also somewhat the product of those astrological effects but not totally. [RH]

3. That It Is Also Beneficial

We have made it fairly clear, then, in a summary fashion, how the goal of prognostication through astronomy becomes possible, and that it may extend only to occurrences in the environing atmosphere itself and the things which accrue to man pursuant to such a cause—these would be in regard to the original capacities of powers and activities of the body and soul, and what they experience chronologically, as well as longness or shortness of life; furthermore, these would also concern as many of the external matters as have an authoritative and natural involvement with the principals, as acquisition and cohabitation have for the body, and esteem and honor for the soul, as well their fortunes chronologically.

The remaining part of our task would be to inquire in a few words about its usefulness, firstly, for those who make distinctions, by considering in what manner and to what end we will understand the value of its usefulness. For if it is in relation to the goods of the soul, what would be more conducive to its welfare, joy, and satisfaction generally than such foreknowledge, according to which we come to see human and divine matters together?¹ And if it is in relation to the goods of the body, such a mode of apprehending would recognize better than any others what is appropriate and suitable to the capacities of each commixture. But if it does not contribute toward wealth or reputation or the like, it will be possible to say the same thing about all philosophy. However, we may not justly condemn either the former [astrology] or the latter [philosophy] on that account as we would be relinquishing something which is useful for greater goods.

But to one who examines generally it would appear that those finding fault with this apprehension for its uselessness are those who do not look at any of the supreme reasons but only at this—that the foreknowledge of what will always and in every way be is superfluous, and this quite simply and indiscriminately. For, first of all, it is necessary to consider that even for events that will necessarily result, the unexpected is apt to cause delirious confusion and mad joy, while foreknowing habituates and trains the soul to attend to distant events as

¹ Astrology as an evidence of the working out of divine will is perhaps one of its most uplifting qualities. It is hard to see how anyone but the most militant materialist can be upset by this. [RH]

though they were present, and prepares it to accept each of the arriving events with peace and tranquillity.¹

Then, too, one need not believe that every single thing thus accrues to man pursuant to a cause above as if it were ordained for each individual from the beginning by some inescapable and divine ordinance and resulted of necessity, there being not a single other cause able to counteract it in the least. Rather, we should believe that it is the motion of the heavens that is produced in accordance with a fate² which is divine and immutable, while the alteration of mundane things, in accordance with a fate which is natural and mutable, takes its first cause from above by accident³ and is concomitant⁴ with it.

We should also believe that some things do happen to men through more general circumstances and not from the peculiar natural capacities of each individual—as whenever they perish in great numbers from conflagrations or plagues or deluges in accordance with great and unpreventable changes of the environing atmosphere, since the lesser cause always yields to the greater and stronger⁵—, while other things happen, in accordance with the natural idiosyncrasy of each individual, through minor and random antipathies of the environing atmosphere. For, with things being distinguished in this way, it is clear that both in general and in particular, for all the occurrences that happen with a first cause which is irresistible and greater than every counteracting cause, it is necessary that these always and in every way result. But for all occurrences which are not so, those that meet with counteracting causes can be easily reversed, while those that do not find them available do indeed follow their primary natures, yet through ignorance⁶ and by no

¹ Although we do not know that Ptolemy was a Stoic, this is an extremely Stoic sentiment. [RH]

² *heimarmenē*.

³ i.e., from the circumstances of things.

⁴ *kata epakolouathēsis*. The idea seems to be that whereas a fate *heimarmenē* is something allotted once and for all ahead of time, the celestial cause is something that pursues us.

⁵ This is Ptolemy's answer to the problem of mass disasters. The general condition takes precedence over the fate of the individual. [RH]

⁶ *agnoian*. [RH]

means through the necessity¹ of a powerful [fate].

One could observe that this same thing also happens for absolutely everything that has natural origins. For, even of stones and plants and animals, and furthermore of wounds and sufferings and illnesses, some naturally cause something by necessity, but others [only] if none of its contraries should counteract. One should believe, then, that even natural philosophers predict what happens to men with foreknowledge of such a kind, and not by coming forward with empty opinions, since some things are unpreventable because the productive causes happen to be many and great, while others allow of being reversed for the opposite reason, just as any physician who is able to diagnose² illnesses has foreknowledge of those which always destroy and those which leave room for aid.

For those matters which are able to turn out differently, one must heed the genethliologist³ when he says, for example, that to such and such a commixture, with such and such a peculiar character of the environing atmosphere, if the underlying proportions are changed in the direction or more or less, such and such an affection will accrue to it, as also [one would heed] the physician when he says that this sore will spread and cause putrefaction, and the miner, for the sake of argument, when he says that the lodestone attracts iron. For just as each of these, if left to itself through ignorance of the counteracting causes, will always and in every way result pursuant to the power of its primary nature, but neither will the sore achieve the spreading or the putrefaction if it meets with the contrary treatment, nor the lodestone attract iron when it is rubbed with garlic—and these preventatives themselves will counteract naturally and by fate—so also for those matters of

¹ *anankē*. [Additional by RH] Here we have an instance of a theme that occurs within the *Corpus Hermeticum*, that in addition to one's irrevocable fate, *heimarmenē*, the individual is subject to additional fate which is caused by ignorance. *agnoia* = *anangke*. In Vettius Valens we discovered that this is ruled by Saturn.

This theme is developed very strongly in the passages that follow, that the most compelling reason to employ astrology is to overcome that part of one's fate that is due to *anangke* born of *agnoia* even if one cannot do much about *heimarmene*. [RH]

² *sēmeioō*. Literally, 'to infer from signs.'

³ Natal astrologer.

prognostication, if the things that will happen to men are unknown, or if they are known and do not meet with counteracting causes, they will always and in every way result following in the train of the first cause. But if they are foreknown and obtain the use of remedies, again naturally and by fate, they will be either completely fail to be generated or made more moderate.

And in a word, since such a power is the same for the things regarded as wholes and for those regarded as parts, one would wonder why in the world all trust in the possibility of foreknowledge in universal matters and in its usefulness for prevention—for the majority agree that they have foreknowledge of the seasons and what the fixed stars indicate¹ and the figurations of the Moon, and they take many precautions for protecting themselves, giving heed to powers of cooling for the summer and powers of warming for the winter, and generally preparing their natures ahead of time for that which is temperate; and furthermore, they watch what the fixed stars indicate for the safety of the season's produce² and for sailing departures, and they observe the figurations of the Moon's light for their fullness in order to commence breeding and planting, and no one ever makes allegations against them of impossibility or uselessness—but on the other hand, for particular matters arising from the commixture of the remaining specific properties (for example, more and less wintry weather or burning heat), and for the individual idiosyncrasies, some believe neither that foreknowing is in this case possible, nor that there are many things that admit of being prevented. And yet, since it is self-evident that if we should happen to have pre-cooled ourselves against burning heat in general, we will be less burned by it, like [measures] can act even against things that increase some such commixture specifically to an excessive amount of heat. But then, the cause of such an error is not only the difficulty and strangeness of the foreknowledge of particulars, which in nearly everything else instills distrust. But since, for the most part, the power of counteraction does not allow of being joined with prognostic, the difficulty is also due to the fact that, as the primary natures keep being produced without impediment owing to the rarity of so perfect a

¹ Robbins has “the significance of the constellations,” which is totally wrong. These are the weather indications connected with the heliacal risings and settings of the fixed stars.

² *hōra*, as an alternative for *ta hōraia*.

disposition, this occasions the opinion that absolutely all events are immutable and irresistible.

But just as it is the case with prognostic itself that even if it should not be altogether infallible, at least the possibility of it has seemed worthy of the most serious attention, so in the same fashion for the goal of prevention, though it too is not therapeutic for everything, yet it is fitting that it should be greeted and embraced and held of no mean value for the several things—however few or minor they should be—in which it is therapeutic.

Having come (so it seems) to these same conclusions, the Egyptians, who have most advanced such capabilities of the art, completely bound medicine to astronomical prognostic. For, they would never have contrived certain evil-averting sacrifices and vigils and therapies¹ for the universal and particular conditions that come on and abide due to the environing atmosphere, if the opinion of the unchangeability and irreversibility of the future had come into existence among them. But now, in placing that which is capable of resisting according to the concomitant natures in the second place of the reckoning according to fate, they have conjoined to the prognostic power a capacity for utility and benefit through what they call iatromathematical [systems], in order that, on the one hand, by means of astronomy, it may succeed in learning the qualities of the underlying commixtures and the occurrences that will take place through the environing atmosphere, and their special causes, since without the assistance of this knowledge these remedies are liable to fail in most instances, seeing that the same remedies are not in the right measure for every body and affection; and on the other hand, by means of the medical art, from the things which are properly sympathetic and the antipathetic to each, they accomplish the goal² by as much as possible taking precautions against future sufferings and making therapies for present ones.

But let these matters be sufficiently formulated for our summary. We will forthwith give an account in the introductory manner, beginning from the specific characteristic of each of the heavenly bodies

¹ *therapeia*. Can also mean service paid to a god, which seems rather likely in this context. For some reason, Robbins has bowdlerized this entire phrase.

² *diateleō*. In nice contrast to the astrological term *apoteleō*.

that concerns the productive¹ itself, in accordance with the observations by the ancients, once they have been made suitable for a natural manner of inquiry, starting from the power of the wandering stars and of the Sun and the Moon.

4. Concerning the Power of the Wandering Stars

The Sun is taken as having the active part² of its essence in heating and in slightly³ drying. These become more easily perceptible to us than the others,⁴ most of all because of the Sun's size and that which is obvious about the seasonal changes, in as much as the more he approaches our zenith, the more he so disposes us.

The Moon has a higher degree of her power in moistening because of proximity to the earth (quite obviously) and the exhalation of moisture, and she so disposes by the outright softening of bodies and by causing them to putrify for the most part; while she also partakes slightly of heating due to the illumination from the Sun.

The star of Kronos has a higher degree of its quality in cooling and in slightly drying because it is the most distant, so it seems, from the warmth of the Sun and, at the same time, from the exhalation of moisture around the earth. But powers for this star and for the remainder also establish themselves through the careful observation of their figurations to the Sun and to the Moon, in as much as some of these stars appear to cooperate [with the Sun and the Moon] in giving a certain turn to the state of the environing atmosphere in the direction of more or less, other stars a different turn.⁵

The star of Ares has a nature chiefly to dry and to burn,

¹ "The productive itself" refers to the idea of production in the Platonic sense of the word, idea. Each of the heavenly bodies participates in this idea in its own specific manner.

² Action is one of the proper attributes of an essence.

³ Throughout this section Robbins takes this adverb with the verb of the main sentence (e.g., "and, to a certain degree, drying"), which is incorrect and subtly changes the meaning.

⁴ Most likely, the other active parts of its essence, not the other planets as Robbins interprets it.

⁵ It is not clear from the context alone whether different powers than the ones assigned here are intended.

appropriately both for the fiery nature of its color and for its proximity to the Sun, since the solar sphere lies underneath it.

The star of Zeus has an active [part] of its power which is temperate, between (as is also the case with its motion) what is cooling in accordance with Kronos and what is burning in accordance with Ares; for, it warms and moistens at the same time, and because its warming [part] is the greater one beneath the underlying spheres, it becomes productive of fertile winds.

And the star of Aphrodite is productive of the same things in accordance with its temperate [activity], but in the opposite manner; for, it warms¹ slightly due to its proximity to the Sun, but mostly it moistens just like the Moon, and it [does this] by appropriating the exhalation of moisture from the atmosphere environing the earth by means of the magnitude of its own light.

The star of Hermes is, on the whole, taken to be sometimes drying and absorptive of moisture because it is never distant in longitude from the warmth of the Sun, and equally moistening at other times because it lies upon the lunar sphere proximate to the earth; and it makes rapid changes in both [states], filling with wind,² as it were, by the keenness of its motion in the vicinity of³ the Sun itself.

¹ It is worth noting that the “warming” of Ptolemy becomes cooling in the Renaissance. The Renaissance astrologers thought that Venus was cold and wet.
[RH]

² *pneumatoumenos*.

³ *peri*. Literally, round about the Sun!

5. Concerning Benefic and Malefic Planets

With these things being so, since of the four fluidities¹ two are the fertile and productive ones, that of the hot and that of the wet (for, everything is compounded and increased by them), while two are destructive and passive, that of the dry and that of the cold (through which all things are in turn separated and destroyed), the ancients accepted two of the planets, the star of Zeus and the star of Aphrodite, and the Moon as well, as being benefic because of being temperate and having their surplus in the hot and the wet. But they accepted the star of Kronos and the star of Ares as being productive of the opposite nature, the one on account of its excessive coldness, the other on account of its excessive dryness. And they accepted the Sun and the star of Hermes as being capable of both because of the commonality of their natures, and as changing in keeping with that planet which they should happen to be attending.

6. Concerning Masculine and Feminine Planets

Again, since the primary genera of natures are two, the masculine and the feminine, while, of the powers mentioned above, that of the wet essence happens to be especially feminine (for, in general this part is innate to greater degree in all females, but the others are more in males), they have fairly handed down to us that the Moon and the star of Aphrodite are feminine because of having their excess in the wet.

¹ *chuma*. Evidently used because the four primary qualities “flow” into each other. Robbins translates this as ‘humors.’ But the present word is neuter, and the word for humor as a physiological term (*chumos*) is masculine. In any case, Ptolemy could not be talking about humors here because they are compounds of the primary qualities taken two by two, and are not identified with the qualities individually (as far as we know at this time). [Additional by RH] From here on in Book I Ptolemy uses these four qualities exclusively and never refers to the elements that became so dominant in later astrology. Unfortunately later astrologers consistently converted Ptolemy's “wet” to “water,” “cold” to “earth,” “hot” to “fire” and “dry” to “air.” The problem is that according to Aristotelian philosophy Water = Cold and Wet, Earth = Cold and Dry, Fire = Hot and Dry, and Air = Hot and Wet. Or if one uses the Stoic system of elements, one gets Water = Wet, Earth = Dry, Fire = Hot, and Air = Cold. What astrologers did was correct according to neither system of elements.

But the Sun, the star of Kronos, the star of Zeus, and the star of Ares are traditionally masculine. And the star of Hermes is common to both genera, in accordance with which he is productive equally of the dry essence and the wet essence.¹

And they say that the stars are being made masculine and feminine during their figurations to the Sun. For, while they are east² relative to the Sun and preceding³ him, they are becoming masculine,⁴ but while they are west⁵ relative to him and following⁶, they are being made feminine. This also happens during their figurations relative to the horizon. For, in the figurations from rising up to culminating, or from setting up to anti-culmination under the earth, they are becoming masculine, since they are eastern;⁷ but in the remaining two quadrants they are being made feminine, since they are western.⁸

7. Concerning Diurnal and Nocturnal Planets

Similarly, since the two most conspicuous of the intervals which make up time are these, and the interval of the day happens to be more

¹ This is not as clear as one would like, but the text does appear to be saying that Hot = Masculine, Wet = Feminine, Dry = Masculine, and Cold = Feminine. If Ptolemy is completely in accord with standard Aristotelianism in which Hot and Cold are both active, whereas Wet and Dry are both passive, then Ptolemy here classifies Hot = Active & Masculine, Cold = Active & Feminine, Wet = Passive & Feminine, and Dry = Passive & Masculine. If this analysis is correct it has all manner of interesting symbolic consequences for astrology. [RH]

² *heōios pros ton helion*. Also called 'matutine.' The expression 'oriental of the Sun,' which seems to have the same application, may have originated in a confused translation of the present phrase.

³ That is, earlier than the Sun in the order of the zodiac.

⁴ In both this and the next phrase, the reader should understand that the masculinization and feminization of the planets is on top of the planets' intrinsic nature. They do not suddenly change sex. [RH]

⁵ *hesperios pros ton helion*. Also called 'vespertine.' Similar remarks can be made about the expression 'occidental of the Sun' as in the note above.

⁶ That is, later than the Sun in the order of the zodiac.

⁷ *apēliōtikos*. Unequivocally refers to a direction in this context, and not a wind.

⁸ *libukos*. Unequivocally refers to a direction here.

masculine because of the heat and vigor in it, but night is more feminine because of its moisture and gift of rest, they have accordingly handed down that the Moon and the star of Aphrodite are nocturnal, but that the Sun and the star of Zeus are diurnal, and the star of Hermes common in regard to these, being diurnal in the morning figure and nocturnal in the evening figure.¹ And they also assigned to each of the sects the two planets of the destructive essence, not however for the same physical reasons but for the opposite ones. For, when stars that are similar to stars of a good mixture become familiar² with them, they make their beneficial character greater, though when unfamiliars³ to the destructive stars hold intercourse⁴ with them, they undo much of the affliction.⁵ Whence, since the star of Kronos is productive of cold, they apportioned it to the heat of day. But since the star of Ares is dry, they apportioned it to the moisture of the night. For, thus each star, in meeting with due measure by mixture, is made akin⁶ to the sect that provides the tempering.

8. Concerning the Power of the Figurations Relative to the Sun

Yet now, also by means of their configurations to the Sun, the Moon and three⁷ of the planets assume the more and less in their proper powers. For, the Moon, from its rising up to the first quarter, is

¹ The preceding references to figures are to the Greek word, *schēma*, and the phrasing is translated literally. However, we and virtually everyone else assume that morning figure = morning star and evening figure = evening star. Also Ptolemy in the *Phases* defines 'phase' as a 'figure', so that we can mentally substitute 'phase' for 'figure', which makes it even clearer. [RH]

² *oikeiō*. Used here as a present passive participle.

³ *anoikeios*.

⁴ *meignumi*. Used here as a present passive participle.

⁵ This implies an interesting definition of what other astrologers call "benefic" and "malefic." A benefic is a planet which improves its nature when that nature is reinforced, whereas a malefic is a planet whose nature is improved when it is counteracted. [RH]

⁶ *oikeios gignetai*.

⁷ Superior planets, Mars, Jupiter and Saturn. We have no clear basis in this text for assuming that Mercury and Venus do anything comparable. They may be too close to the Sun to vary in this way. [RH]

increasingly¹ more productive of moisture, from first quarter to whole moon, of heat, from whole moon up to second quarter, of dryness, and from second quarter up to concealment, of coldness.

And the wandering stars that are eastern² are increasingly more productive of moisture from their rising³ up to the first station, of heat from the first station up to the acronycal rising,⁴ of dryness from the acronycal rising up to the second station, and of coldness from the second station up to setting.⁵

And it is clear that as the planets commingle with each other they create a great variety of differences of quality in our environing atmosphere, with the specific power of each planet prevailing for the most part, but [the power] being changed *quantitatively* by the power of the ones being configured.

¹ *kata tēn auxēsis*. [Additional by RH] This is one of those seemingly trivial items which in fact lies at the basis of a fundamental misunderstanding of Ptolemy. As rendered in most translations, based in part on incorrect emendations of the original text, Ptolemy has seemed to say that the whole first quarter of the Moon is wet, the second quarter hot, the third quarter dry and the last quarter cold. But if the Greek is interpreted correctly Ptolemy is saying something quite different. He is saying that wetness increases as the Moon moves toward the first quarter until it is the predominant quality. Then in the second quarter heat increases until it is the dominant quality. In the third quarter it is the same with dryness and in the last with cold. We have here not four boxes containing qualities but four phases in the continuous ebb and flow of the four qualities. Furthermore in section 10 we discover that the seasons have the same ebb and flow of qualities. However, later astrologers converted the increasing wetness of the first quarter phase of the Moon to a constant level of *airiness*. And they did the same with the wetness of the spring. By this means they equated the 90° of the lunar cycle with spring. However, if the wetness increases through the first 90° then cold must predominate at the beginning. This means that the New Moon cyclically equates to the Sun at 0° Capricorn as a cold point not to the Sun at 0° Aries as a wet point. This may be one of the most fundamental misunderstandings of Ptolemy that has ever occurred with tragic consequences for weather forecasting and mundane astrology. The reader should also note that this corrected correlation is theoretically consistent and conforms to modern studies of biological clocks.

² eastern with respect to the Sun, i.e. morning stars. [RH]

³ Heliacal rising. [RH]

⁴ Rising at sunset. [RH]

⁵ Helical setting. [RH]

9. Concerning the Power of the Fixed Stars

As it is next in order to run through the natures of the fixed stars with regard to what they produce on their own, we will set out the specific characteristics observed for them by explaining their similarity to the natures of the wandering stars. And first of all, the natures of the stars that occupy the formations around the ecliptic circle itself.

The stars in the head of Aries, then, have a productive effect which is mixed similarly to the power of Ares and the power of Kronos; those in the mouth, similarly to the power of Hermes and slightly like that of Kronos; those in the hind foot, similarly to the power of Ares; and those in the tail, to that of Aphrodite.

Of the stars in Taurus, those upon the line cutting it off have a mixture like the star of Aphrodite and slightly like that of Kronos; those in the Pleiades, like the Moon and the star of Ares; of those in the head, the bright and somewhat reddish star of the Hyades (called the Torch¹) has a mixture like the star of Ares, while the remainder like the star of Kronos and slightly like Hermes; and those in the points of the horn, like the star of Ares.

Of the stars in Gemini, those upon the feet share a similar quality with the star of Hermes and somewhat with the star of Aphrodite; the bright stars in the thighs, with the star of Kronos; of the two bright stars in the heads, the one in the preceding head (also called the star of Apollo²) shares with the star of Hermes, while the one in the following head (also called the star of Heracles³) with the star of Ares.

Of the stars in Cancer, the two upon the feet produce the same action as the star of Hermes and somewhat the same as the star of Ares; the stars in the claws,⁴ as the star of Kronos and the star of Hermes; the cloud-like cluster in the breast (called the Manger⁵), as the star of Ares and the Moon; and the two on either side of it (called the Asses), as the star of Ares and the Sun.

Of the stars in Leo, the two upon the head cause a similar [effect] as the star of Kronos and slightly as the star of Ares; the three stars in

¹ Aldebaran. [RH]

² Castor. [RH]

³ Pollux. [RH]

⁴ The Scales of Libra. See page 21, note 1. [RH]

⁵ Praesaepe. [RH]

the throat, as the star of Kronos does and slightly as the star of Hermes; the bright star upon the heart (called Regulus), as the star of Ares and the star of Zeus; the stars in the hip and the bright star upon the tail, as the star of Kronos and the star of Aphrodite; and the stars in the thighs, as the star of Aphrodite and slightly as the star of Hermes.

Of the stars for Virgo, those in the head and the one upon the tip of the southern wing have a productive [effect] like the star of Hermes and slightly like the star of Ares; the remaining bright stars of the wing and those along the girdles, like the star of Hermes and slightly like the star of Aphrodite; the bright star in the northern wing (called Vindemiatrix), like the star of Kronos and the star of Hermes; the so-called Spica, like the star of Aphrodite and slightly like the star of Ares; and the stars in the tips of the feet and the train of the robe, like the star of Hermes and slightly like the star of Ares.

Of the Claws of Scorpio,¹ the stars at their tips² dispose in the same manner as the star of Zeus and in somewhat the same manner as star of Hermes, while the stars in the middle dispose in the same manner as the star of Kronos and in somewhat the same manner as the star of Ares.

Of the stars in the body of Scorpio, the bright stars in the forehead cause the same [effect] as the star of Ares causes and somewhat the same as the star of Kronos causes; the three stars in the body, the middle one of which is reddish-brown and fairly bright (and is called Antares), as the star of Ares does and somewhat as the star of Zeus; the stars upon the joints, as the star of Kronos does and somewhat as the star of Aphrodite; the stars upon the sting, as the star of Hermes and as the star of Ares; and the following cloud-like cluster, as the star of Ares and the Moon.

Of the stars around in Sagittarius, those upon the point of the arrow have a productive [effect] like the star of Ares and the Moon; those in the bow and the hand-grip, like the star of Zeus and the star of Ares;

¹ Alternative name for Libra. [Additional by RH.] Among many Greek authors, including Ptolemy, it was conventional to consider Libra as the claws of Scorpio. Many modern astrologers have regarded this as an indication that Libra is a relatively recent constellation made by splitting the claws off the scorpion. However, it appears more likely that this is simply an alternative tradition. Scales in approximately the same location among the stars as Libra are to be found in early Mesopotamian sources.

² Alpha and Beta Librae, the Scales. [RH]

the cluster in the face, like the Sun and the star of Ares; those in the shoulder-blades¹ and back, like the star of Zeus and slightly like the star of Hermes; and the quadrangle upon the tail, like the star of Aphrodite and slightly like the star of Kronos.

Of the stars in Capricorn, those upon the horns act in the same fashion as the star of Aphrodite and in slightly the same fashion as the star of Ares; the stars in the mouth, in the same fashion as the star of Kronos, and slightly like the star of Aphrodite; those in the feet and in the belly, as the star of Ares and the star of Hermes; and the stars upon the tail, as the star of Kronos and the star of Zeus.

Of the stars in Aquarius, those in the shoulders dispose similarly to the star of Kronos and to the star of Hermes, together with those in the left arm and in the cloak; the stars upon the thighs, more like the star of Hermes, less like the star of Kronos; and the stars in the flow of water, similarly to the star of Kronos and somewhat so to the star of Zeus.

Of the stars in Pisces, those in the head of the southern fish act the same as the star of Hermes and somewhat the same as the star of Kronos; the stars in the body, as the star of Zeus and the star of Hermes; the stars upon the tail and upon the southern cord, as the star of Kronos acts and somewhat as the star of Hermes does; the stars in the body and in the spine of the northern fish, as the star of Zeus does and somewhat as the star of Aphrodite; the stars in the northern cord, as the star of Kronos and the star of Zeus; and the bright star upon the knot, as the star of Ares and somewhat as the star of Hermes.

Concerning the Formations farther north than the Zodiac

Of the formations farther north than the zodiac, the bright stars in Ursa Minor have a quality like the star of Kronos and somewhat like the star of Aphrodite.

The stars in Ursa Major, like the star of Ares.

The stars in the cluster of Coma Berenices beneath the tail of the Bear, like the Moon and the star of Zeus.

The bright stars in Draco, like the star of Kronos and the star of

¹ Robbins' text has the Greek word for 'cloak' here.

Zeus.¹

The stars in Cepheus, like the star of Kronos and the star of Zeus.

The stars in Bootes, a quality like the star of Hermes and the star of Kronos; but the bright and reddish-brown star called Arcturus, like the star of Ares and the star of Zeus.

The stars in Corona Septentrionalis, like the star of Aphrodite and the star of Hermes.

The stars for the Geniculator, like the star of Hermes.

The stars in Lyra, like the star of Aphrodite and the star of Hermes.

And the stars in Cygnus similarly.

The stars for Cassiopeia, like the star of Kronos and the star of Aphrodite.

The stars for Perseus, a quality like the star of Zeus and the star of Kronos; but the cluster in the hilt of the sword, like the star of Ares and the star of Hermes.

The bright stars in Auriga, like the star of Ares and the star of Hermes.

The stars for Ophiuchus, a quality like the star of Kronos and somewhat like the star of Aphrodite.

The stars in his serpent, like the star of Kronos and the star of Ares.

The stars for Sagitta, a quality like the star of Ares and somewhat like the star of Aphrodite.

The stars in Aquila, like the star of Ares and the star of Zeus.

The stars in Delphinus, like the star of Kronos and the star of Ares.

The bright stars for Pegasus, like the star of Ares and the star of Hermes.

The stars in Andromeda, like the star of Aphrodite.

And the stars in Triangulum, like the star of Hermes.

Concerning the Formations farther south than the Zodiac

Of the stars in formations farther south than the zodiac, the bright star in the mouth of Pisces Australis has an action like the star of Aphrodite and the star of Hermes.

The stars in Cetus, like the star of Kronos.

¹ The Greek text of Robbins has the planet Ares associated with Draco as well as these two.

Of the stars in Orion, those upon his shoulders have an action like the star of Ares and the star of Hermes; but the remaining bright stars, like the star of Zeus and the star of Kronos.

Of the stars in Eridanus, the last and bright star, like the star of Zeus; but the remaining stars, like the star of Kronos.

The stars in Lepus, like the star of Kronos and the star of Hermes.

Of the stars in Canis, the others, like the star of Aphrodite; but the bright star in his mouth, like the star of Zeus and somewhat like the star of Ares.

The bright star in Procyon, like the star of Hermes and somewhat like the star of Ares.

The bright stars for Hydra, like the star of Kronos and the star of Aphrodite.

The stars in Crater, like the star of Aphrodite and somewhat like the star of Hermes.

The stars in Corvus, like the star of Ares and the star of Kronos.

The bright stars in Argo, like the star of Kronos and the star of Zeus.

Of the stars in Centaurus, the ones in the human body, like the star of Aphrodite and the star of Hermes; but bright stars in the horse, like the star of Aphrodite and the star of Zeus.

The bright stars in Lupus, like the star of Kronos and somewhat like the star of Ares.

The stars in Ara, like the star of Aphrodite and somewhat like the star of Hermes.

And the bright stars in Corona Australis, like the star of Kronos and the star of Hermes.

The individual powers of the fixed stars, then, under the observations of the ancients, happen to be such as these.

10. Concerning the Seasons of the Year

And there being four seasons of the year, which are spring, summer, autumn, and winter, the spring has its excess in the wet because of its diffusion during the past cold, and with the heat just beginning. The summer has its surplus in the hot because of the proximity of the Sun to our zenith; the autumn has its excess in the dry because of the sucking up of the waters during the burning heat. And the winter has its surplus in the cold because the Sun is farthest removed from our

zenith.¹

For this reason, there being no single beginning of the zodiac by nature as it is a circle, they postulate that the twelfth-part starting from the spring equinox, that of Aries, is also the starting point of them all, making the wet excess of the spring be the initial cause² of the zodiac, as though of a living thing, and making the remaining seasons [the causes] for what comes next [in the zodiac]. This is because the first age of all living things, almost like the spring, has a surplus of wetness, being tender and still delicate. And the second age, which is up to the prime of life, has its surplus in the hot, almost like the summer. And third age, which is already past the prime and at the beginning of decay, already has its surplus in the dry, almost like the autumn. And the last age, which is near dissolution, has its excess in the cold, as does the winter.

11. Concerning the Power of the Four Angles

Similarly,³ too, there being four places and angles of the horizon, from which the winds blowing generally also have their origin, the place in the oriental regions has its surplus, too, in the dry because when the Sun comes to be upon it, whatever was made wet from the night then first begins to be made dry; and the winds that blow from it, which we more commonly call *Apeliotes*⁴ are without moisture and drying. The place in the region of midday is itself the hottest because of the fiery heat of the culminations of the Sun, and because, in accordance with the inclination of our inhabited world, these culminations incline more

¹ Note that starting with spring the sequence of qualities is Wet, Hot, Dry and Cold. This is different from the day cycle as described further on. [RH]

² *prokatartikos*. This word indicates much more than a merely convenient spatial origin; it is here implied that the spring the originating cause of the overall qualitative character of the zodiac. This would seem to reduce the importance of the zodiac itself to that of a marker for the position of the Sun (and to a lesser extent the other planets) and the seasonal changes brought about thereby! Remember that Aristotle himself regards the Sun as the primary cause of all sublunary change.

³ Here in the diurnal cycle we find that, starting with dawn, the sequence of qualities is Dry, Hot, Wet, Cold. This is traversing the cycle of qualities in the reverse direction from the year cycle in the previous section. [RH]

⁴ Literally, 'the wind from the Sun.'

toward the region of midday;¹ and the winds that blow from it, which we commonly call *Notos*, are hot and productive of swelling.² The place in the occidental regions is itself wet because when the Sun comes to be upon it, whatever was dried out³ from the day then first begins to be made wet; and the winds carried from it, which we more commonly call *Zephyrus*, are fresh and moistening. The place in the regions of the Bear⁴ is itself the coldest because in accordance with the inclination of the inhabited world, the culminations of the Sun, which are the causes of heat, are far removed from it, as is the case when the Sun is anticulminating; and the winds blowing from it, which are commonly called *Boreas*, are truly cold and compressive.⁵

The distinguishing of these matters is useful for being able to judge every turn⁶ that the commixtures⁷ take on every occasion. For, it is easy to see that since the productive [part] of the power of the stars in a certain sense alters its course by means of such conditions of season or age or angle, and in congenial⁸ conditions they have a quality which is more unmixed and an actualization which is stronger (for example, in hot conditions those which are productive of heat have this nature, in cold conditions those productive of cold), while in the opposite conditions they have a quality which is mixed and an actualization which is weaker (as those productive of heat in cold conditions and those productive of moisture in dry conditions and in the others similarly according to the proportion of the quality commixed with the mixture.⁹

¹ *mēsēmbria*. That is, the south.

² *plērōtikos*.

³ passive from *anapopinō*. Literally, 'what was not drunk off;' that is, what was left after the water was drawn off.

⁴ That is, Ursa Major.

⁵ *puknōtikos*.

⁶ That is, how they change.

⁷ *sunkrasis*. Robbins has 'temperatures' here, which is totally inconsistent with Ptolemy's usage in this book.

⁸ *oikeios*.

⁹ This amounts to a system of dignities in which planets are reinforced or inhibited in their expression by the qualitative nature of the sign, quadrant of the year or quadrant of the mundane sphere in which they find themselves. This is an idea that was not widely developed by any sources with which we are familiar, but it warrants inquiry. [RH]

12. Concerning Tropical, Equipartite, Solid, and Bicorporeal *Zōidia*

With these things set forth, it would be in order to adjoin the traditional, specific natural characteristics of the zodiacal twelfth-parts themselves. Now, the more general mixtures for each of them are analogous to the seasons which arise in them, but some of their peculiarities are also established from their congeniality¹ with the Sun and the Moon and the stars, which we will recount in the following sections, setting first the powers of the twelfth-parts themselves alone in their purity, regarded by themselves and in relation to each other.

The first distinctions, then, are of the so-called tropical, equipartite, solid, and bicorporeal twelfth-parts. Now, two are tropical, the first thirty degree interval from the summer tropic, that of Cancer, and the first from the winter tropic, that along Capricorn. These have received their names from an accident;² for, the Sun turns when he comes to be at the beginnings of them, reversing in the opposite direction of his latitudinal passage, causing summer in Cancer and winter in Capricorn.

And two are called equipartite, the first twelfth-part from the spring equipartition, that of Aries, and the one from the autumn equipartition, that of the Claws.³ These, again, have been named from an accident, since when the Sun comes to be at the beginning of them, he makes the nights everywhere equal to the days.

Of the remaining eight twelfth-parts, four are called solid, and four are called bicorporeal. And those following the tropical and equipartite twelfth-parts are solid, Taurus, Leo, Scorpio, and Aquarius, since the wetness, hotness, dryness, and coldness of the seasons that begin in those preceding twelfth-parts bear down upon us more firmly⁴ when the Sun comes to be in these twelfth-parts, not because the conditions naturally arising at that time are more unmixed, but rather after we have already continued a long time in them, we also for that reason perceive

¹ *oikeiōsis*.

² This is 'accident' meaning not essential or intrinsic. In modern language this is almost the same as a coincidence. Here Ptolemy is explicitly divorcing the signs from the constellations. [RH]

³ Libra. See page 21, note 1. [RH]

⁴ *stereōteron*. This gives us a somewhat better idea of how to understand the "solidity" of these *zōidia*.

their power more sensibly.¹

Those following the solid twelfth-parts are bicorporeal, Gemini, Virgo, Sagittarius, and Pisces because of being in between the solid and tropical and equipartite twelfth-parts, and, as it were, sharing the specific natural characteristics of the two states of weather at their ends and at their beginnings.²

13. Concerning Masculine and Feminine *Zōidia*

Again, they similarly assigned six of the twelfth-parts to the masculine and diurnal nature, and six to the feminine and nocturnal nature. The order given to them was every other one because day is always coupled to night, and female is always found close to male. With the beginning taken from Aries for the reasons we have said, and similarly also with the male holding the first position since indeed the active is foremost over the passive in power, the twelfth-parts Aries and the Claws³ were thought to be masculine and diurnal since indeed the equipartite circle drawn through them produces the foremost and most powerful movement of the whole. And the next twelfth-parts in sequence were thought to follow in order every other one, as we said.

Some, however, use a series of masculine and feminine twelfth-parts and make the beginning of the masculine from the rising twelfth-part, which they call "marking the hour." For, just as a few take the beginning of the tropics from the lunar *zōidion* because it makes a quicker turn than the others, so also they take the beginning of the masculines from the twelfth-part marking the hour because it is farther

¹ The reader should note that the logic of either solid or fixed has no connection with the symbolism of the constellations. It has meaning only in the context of a seasonal zodiac. Yet this was in his time a traditional classification. This strongly indicates that the Greek astrologers were thinking tropically whatever they were doing with measurements. [RH]

² These divisions clearly correspond to the modern quadruplicities, although the members of these classifications do not seem to be regarded a unity as is the case with the trigons or triplicities. It is also interesting to see that the "mutability" of the bicorporeal signs is here not something shared as a quality by the whole *zōidion*, but consists in its having a different character at opposite ends.

³ Libra. See page 21, note 1. [RH]

east. And some, similarly, again make use of the order of every other one; others divide into whole quadrants and believe the quadrant from the *Hōroskopos* up to the Midheaven and the one conversely from the descendent up to the Midheaven under the earth to be eastern and masculine, while the remaining two quadrants are western and feminine.

They have also adapted other appellations to the twelfth-parts from the shapes in them. I mean, for example, 'quadruped,' 'terrestrial,' 'dominant,' 'fertile,' and the like, which, being self-explanatory and self-evident, we think it superfluous to recount in detail, since the quality arising from such types can be set forth in whichever of the predictions it should seem useful.

14. Concerning the Twelfth-Parts that Are Configured

Those parts of the zodiac are in the first place congenial to each other which configure with each other.

These are all those which have a diametrical interval, containing two right angles and six twelfth-parts and 180 degrees; and all the ones which have a triangular interval, containing one and a third right angles and 4 twelfth-parts and 120 degrees; and all the ones said to square, containing one right angle and three twelfth-parts and 90 degrees; and all the ones that make a hexagonal interval, containing two-thirds of a right angle and 2 twelfth-parts and 60 degrees.

We may learn the reason why only these intervals were traditionally accepted from the following. Now, the rationale for the diameter is self-evident since indeed it causes meetings upon a straight line. And if we take the two greatest fractions and superfractions¹ that are in harmony, after the fractions one-half and one-third are taken of the diameter of two right angles, the partition into two results in the interval of a square, while that into three results in the interval of a hexagon and a triangle. And after the superfractions one and one-half² and one and

¹ *epimorion*. Literally, a part upon (i.e., in addition to) a whole. Also called a 'superparticular' from the Latin. [Additional by RH] Whereas regular fractions are parts of unity (1), superfractions are unity plus a fraction.

² *hēmīolios*. Also called 'sesquialter' from the Latin. The superfraction $1\frac{1}{2}$ turns into the ratio $\frac{3}{2}$.

one-third¹ are taken of the square of one right angle, the superfraction one and one-half makes the interval of the square in relation to that of the hexagon, while again the superfraction one and one-third makes the interval of a triangle to that of the square.

Yet,² of these configurations, triangles and hexagons are called harmonious because they are set together from twelfth-parts of the same genus, either entirely of masculine ones or entirely of feminine. But squares and diametrical oppositions are disharmonious because they take their interval in such a way as to set twelfth-parts of the same genus counter to each other.³

15. Concerning *Zōidia* that Command and in Like Manner Obey

Similarly, those sections figured at an equal interval from the same equipartite point⁴ (or from the other one as well) are said to be commanding and obeying because of their ascending and descending in equal times and being upon equal parallels.⁵ And of these the ones in the summer semicircle are called commanding and those in the winter semicircle obeying because when the Sun comes to be in the former, he makes the day longer than the night, while in the latter shorter.

¹ *epitritos*. Also called 'sesquitertian' from the Latin. The superfraction $1\frac{1}{3}$ turns into the ratio of $\frac{4}{3}$.

² *mentoi*. This particle indicates that the upcoming paragraph will give Ptolemy's own preferred reason for the harmonious and disharmonious character of the traditional configurations. His reasoning follows the "natural method," that is, the method of Aristotelian natural philosophy which is most appropriate for material quality.

³ The Greek uses two senses of the *antithesis*. Interpreting this usage, the Greek seems to be saying that the square blocks the synthesis that would come from a trine or sextile, while the opposition sets two harmoniously related signs in opposition to each other. [RH]

⁴ *isēmerinos sēmeion*. That is, equinoctial point. Here the noun clearly means 'point' instead of 'sign,' as in common mathematical usage.

⁵ i.e. parallels at the same distance but opposite sides of the equator. Were they parallel on the same side, Ptolemy would have said 'same parallel', not 'equal parallel'. [RH]

16. Concerning *Zōidia* that See and Are Equipollent to Each Other

Again, they say that parts equally distant from the same tropic point¹ (or from the other one as well) are equipollent to each other because when the Sun comes to be in each of them, he produces days equally as long as the days, nights as the nights, and equally long intervals of the proper hours.² And these are said to see each other both for the aforesaid reason and since indeed each of them rises from the same parts of the horizon and sets in the same parts.³

17. Concerning Unconnected *Zōidia*

Segments are called unconnected⁴ and alienated⁵ whenever they simply do not have a single one of the aforementioned relationships of mutual familiarity.⁶ These are the ones that do not happen to belong to either the commanding or obeying *zōidia*, or the seeing or equipollent *zōidia*; and furthermore, they are those which, arising either after one or after five twelfth-parts, are taken to have absolutely no share in the four configurations set out (that of the diametrical opposition, the triangle, the square, and the hexagon), since indeed those which arise after one⁷ are, as it were, averted from one another, while those which arise after five⁸ divide the whole circle into unequal parts, though the other figurations make equal divisions of the perimeter.

¹ *tropikos sēmeion*. That is, solstitial point.

² That is, the seasonal hours obtained by dividing the entire period of day (or night) into twelve equal hours.

³ The traditional classification that is lacking in Ptolemy is that of like-engirding *zōidia* (cf. Paulus section 12), namely, those which are the houses of the same planet.

⁴ *asundetos*.

⁵ *apēllotriōmenos*.

⁶ *oikeiōsis*.

⁷ The semi-sextile.

⁸ The quincunx or inconjunct.

18. Concerning the Houses of Each Star

The planets, too, are affiliated¹ to parts of the zodiac through their so-called houses, trigons, exaltations, boundaries, and such like. And the matter concerning the houses has the following nature. Since the most northern of the 12 *zōidia* are Cancer and Leo, which in drawing closer than the others to our zenith thereby happen to be more able to procure heat and warmth, they portioned out these two as houses to the greatest and most authoritative planets, that is, to the lights, with Leo going to the Sun since it is a masculine *zōidion*, and Cancer going to the Moon since it is feminine. And accordingly, they laid down that the semicircle from Leo up to Capricorn was solar, while the semicircle from Aquarius to Cancer was lunar, in order that in each of the semicircles one *zōidion* could be apportioned to each of the five planets appropriately,² the one being figured in relation to the Sun, and the other in relation to the Moon, in keeping with the spheres of their motions and their natural characteristics.

For, to the star of Kronos, as it is more cooling in its nature in accordance with the contrariety of heat,³ and as it occupies the highest zone far from the lights, were given the *zōidia* diametrically opposite those of Cancer and Leo—that is, Capricorn and Aquarius—also because of the cold and wintry weather happening in these twelfth-parts, and furthermore because the diametrical configuration is disharmonious for beneficence.

And to the star of Zeus, as it is temperate and under the sphere of

¹ This is a passive form of *sunoikeioō*, which literally means 'to bind in kinship,' but more generally means 'to affiliate.' Note that when Ptolemy turns to a discussion of the relationships of the planets to the *zōidia*, he uses this verb rather than the verb *oikeioō*, which he had used when discussing the relationships of the *zōidia* to each other. In the passive, *sunoikeioō* may mean either to be in the condition of kinship with something, or else to be bound into this condition. Because of this ambiguity, it is not clear from the present context alone whether the planet is akin to a part of the zodiac ahead of time, or is only adapted to the nature of the *zōidion* through its residence there. However, we believe that this sudden emphasis on the prefix *sun* indicates that the planet is understood to play the latter subordinate role. See the **General Note** in the translator's preface.

² *oikeiōs*.

³ Which is, of course, the quality of cold.

Kronos, were given the two *zōidia* adjacent to the preceding ones, Sagittarius and Pisces, which are windy and fertile and in a triangular interval with the lights, which is that of a harmonious and benefic configuration.

And next, to the star of Ares, as it is more drying in its nature and as it occupies the sphere under Zeus, again were given the twelfth-parts adjacent to the former and having a similar nature, Aries and Scorpio, making a square interval with the lights in keeping with its destructive and disharmonious quality.

And to the star of Aphrodite, as it is more temperate and is under the sphere of Ares, were given the two *zōidia* adjacent to the former which are most fertile, the Claws¹ and Taurus, since they observe the harmony of the hexagonal interval, and since this star is at most no more than two twelfth-parts apart from the Sun on either side.

And finally, to the star of Hermes, as it never distant from the Sun by more than one twelfth-part on either side, and as it is beneath the other spheres while being in a certain sense closer to both the lights, were given the remaining two twelfth-parts contiguous to the houses of the former, that is, Gemini and Virgo.

19. Concerning Trigons

And the [planetary] affiliation relative to trigons happens to be such as the following. Since the trigonal and equilateral shape is most harmonious with itself, and² the zodiac is bounded by three circles (the

¹ Libra. See page 21, note 1. [RH]

² Robbins takes the clause introduced by 'and' as the consequence of the first clause, translating '*kai*' by 'also,' and then makes a deprecating remark about numerological reasoning. Although this is grammatically possible, we do not think it is correct, and have taken '*kai*' as a coordinate conjunction. [Additional by RH] The difference between our rendition of this passage and the Robbins is that Robbins makes the three circle reference seem to be somewhat gratuitous. However if one makes the '*kai*' an 'and' rather than an 'also', it connects the three circles to the triplicities as a cause of the triplicities' existence rather than an irrelevant numerological device. In other words the text argues that there are triplicities not only because of the stability of the triangle, but also because in each of these triplicities there is one sign nearest the tropic of Cancer, one near the equator (equipartite circle) and one nearest the tropic of Capricorn. It seems as if virtually no statement is irrelevant or superfluous

equipartite circle¹ and the two tropics), while its 12 parts are divided into 4 equilateral trigons, the first trigon, which is through the *zōidia* of Aries and Leo and Sagittarius, since it is composed of three masculine *zōidia* and contains the houses of the Sun and Zeus and Ares, was given to Zeus and the Sun, Ares being out of the solar sect. The Sun assumes the first co-rulership² of it by day, while the star of Zeus assumes it by night. Also, Aries is nearer the equipartite circle, Leo the summer tropic, and Sagittarius the winter tropic. This trigon is made principally northern through the co-rulership of Zeus, since indeed this planet is fertile and windy, appropriately for the winds from the north. However, owing to the house of Ares, it takes on a certain admixture of the west and is appointed the northwest, since indeed the planet of Ares is productive of such winds because of its lunar sect and the feminine character of the occident.³

The second trigon, which is through the *zōidia* of Taurus and Virgo and Capricorn, is composed of three feminine *zōidia*. Accordingly, it was given to the Moon and to Aphrodite, its ruler by night being the Moon, but by day the star of Aphrodite. Also, Taurus is nearer the summer circle, Virgo the equipartite circle, and Capricorn the winter one. This trigon becomes principally southern through the rulership of Aphrodite, since indeed this star is productive of similar winds through the heat and moisture of its power. However, by receiving in addition an admixture of the east (because the house of Kronos occurs within it) it is appointed the southeast in antithesis to the first triplicity, since indeed the star of Kronos is also productive of such winds, being itself akin to the orient because its sect is according to the Sun.

in Ptolemy's writing.

¹ equator. [RH]

² The Teubner text has a *sun** preceding the word for rulership. This is possibly of some importance because of the way in which later astrologers used Ptolemy's triplicity rulerships. Those astrologers who used the three rulership system always granted some dignity to the triplicity ruler of the other sect, i.e., the night ruler in a day chart and vice versa. Those who used the Ptolemaic system tended to use only the ruler that was in sect. This word translated as 'co-rulership' seems to imply that even for Ptolemy the ruler out of sect may have had some importance. [RH] * Greek prefix for co-, not the planet!

³ The Greek names for winds and their names for directions are usually the same, and Robbins often seems to confuse them here.

The third trigon, which is through Gemini and the Claws¹ and Aquarius, is composed of three masculine *zōidia*, and having no relationship to the star of Ares, while having one to the star of Kronos and that of Hermes by their houses, to these were apportioned in turn the star of Kronos to rule by day because of his sect and the star of Mercury by night. Also, the twelfth-part of Gemini is near the summer circle, that of the Claws² is near the equipartite circle, and that of Aquarius is near the winter circle. This trigon is indeed principally appointed the east because of the star of Kronos, but the northeast by admixture because the sect of the star of Zeus is affiliated with the sect of the star of Kronos in accordance with the diurnal determination.³

The fourth trigon, which is through Cancer and Scorpio and Pisces, was left to the sole remaining planet, which is the star of Ares and which has a relationship to it through the house of Scorpio, and to the ones co-ruling with it because of the sect and the femininity of the *zōidia*, the Moon by night and the star of Aphrodite by day. Also, Cancer is near the summer circle, Scorpio nearer the winter circle, and Pisces nearer the equipartite circle. And this trigon is principally appointed the west because of the rulership of Ares and the Moon, but the southwest by admixture through the co-rulership of Aphrodite.⁴

¹ Libra. See page 21, note 1. [RH]

² Libra. See page 21, note 1. [RH]

³ The word is *logos*, which can mean a definition or division. Here it is clearly being used as a synonym for sect. [RH]

⁴ Ptolemy's triplicity rulership is a modification of the more common one found in other Greek authors. It seems as if Ptolemy wanted to simplify the usual system by eliminating the third or common ruler. The third ruler was always less important than the diurnal and nocturnal rulers and had equal power by day and by night. Usually the third ruler was simply the only remaining planet not already assigned rulership to the triplicity that was also of the same sect as the triplicity (except in the case of the Cancer, Scorpio, Pisces triplicity). Below is a table showing the more common triplicity rulership system with the rulers excluded by Ptolemy in *italics*.

The signs of the first triplicity are ruled by the Sun, Zeus and Ares. The Sun is the most diurnal ruler. It gets the day rulership. Zeus is less diurnal, but not nocturnal, therefore it gets the night rulership. Ares is excluded because it is nocturnal. Kronos is added by other authors because it is of the same sect even though it has no major dignities in this triplicity. That is probably why Ptolemy rejects it.

| | Diurn. | Noct. | Comm. |
|-------|--------|-------|-------|
| ♄ ♀ ♂ | ☉ | ♃ | ♂ |
| ♂ ♀ ♀ | ♀ | ♂ | ♂ |
| ♂ ♀ ♀ | ♂ | ♀ | ♂ |
| ♂ ♀ ♀ | ♀ | ♂ | ♂ |

The second triplicity consists of Taurus, Virgo and Capricorn, which are ruled by Aphrodite, Hermes, and Kronos respectively. Of these Hermes is not especially nocturnal, and Kronos is definitely diurnal. This leaves only Aphrodite. However, the Moon is nocturnal and is exalted in Taurus. So Aphrodite, which is more diurnal than the Moon, gets the day rulership and the Moon gets the night rulership. Ares is added as the common ruler by other authors because it is of the same sect. However, probably again because it has no dignity in this triplicity, Ptolemy rejects it.

The third triplicity consists of Gemini, Libra and Aquarius, which are ruled by Hermes, Aphrodite and Kronos respectively. Of these Kronos is the most diurnal and gets the day rulership. Hermes is less diurnal and gets the night rulership. Aphrodite is nocturnal and rejected entirely. Other authors add Zeus because it is of the same sect even though it has no major dignity in this triplicity. Again Ptolemy rejects it.

The last triplicity consists of Cancer, Scorpio and Pisces, which are ruled by the Moon, Ares and Zeus respectively. Here we have a different situation. Using Ptolemy's two-ruler system, we have only Ares left to rule in both day and night. However, the other authors make Aphrodite the day ruler because she is exalted in Pisces and is the least nocturnal of the planets qualified for rulership. The Moon, ruling Cancer, is the most nocturnal and gets the night rulership. Ares, however is more than just the remaining nocturnal planet as it was with the Taurus, Virgo, Capricorn group. It is an actual ruler in this triplicity, namely of Scorpio. This makes it the only common ruler that has major dignity within its triplicity. This is undoubtedly why Ptolemy makes it the primary ruler of this triplicity both day and night. [RH]

20. Concerning Exaltations

The so-called exaltations of the wandering stars have the following rationale.

Now, since the Sun, when he enters Aries, makes a transition to the higher and northern semicircle, and in the Claws¹ passes into the lower and southern one, they have fittingly assigned Aries to him as his exaltation, wherein the length of the day and the heating power of his nature begin to increase; and they have assigned the Claws as his depression for the opposite reasons.

The star of Kronos, in order to be set opposite to the Sun once again just as it was also in the case of their houses, took the reverse: Libra as its exaltation and Aries as its depression. For where heat increases there cold diminishes, and where cold increases there heat diminishes.

Again, since the Moon, when she becomes conjunct in Aries, the exaltation of the Sun, makes an appearance and begins to increase her light and, as it were, her height in Taurus, the first *zōidion* of her own trigon, this was called her exaltation; and the diametrically opposite *zōidion*, Scorpio, was called her depression.

Next, the star of Zeus, being productive of the fertile north winds, again increases and executes its own special power when it becomes farthest north,² especially in Cancer; whence they have made this *zōidion* its exaltation, Capricorn its depression.³

The star of Ares, being by nature a cause of heat, is even more so in Capricorn since it becomes more caustic by becoming most southerly, and it properly took Capricorn as exaltation and Cancer as depression,

¹ Libra. See page 21, note 1. [RH]

² The word 'especially' (*malista*) is ignored by Robbins (unless he took it as a redundant superlative with "farthest north"). Syntactically, it almost has to go with the phrase "in Cancer."

³ It is the natural power of the star of Zeus to produce the fertile north winds. These normally occur in the summer when the Sun is in Cancer. When the star of Zeus is in Cancer as well, this reinforces the usual effect. This is because the star of Zeus in Cancer is the farthest north it ever gets. Robbins' translation altogether misses the middle point (i.e., the winds happening when the Sun is in Cancer) and thus obliterates the physical reasoning here, just as he does in the upcoming treatment of Ares.

the antithesis of the star of Zeus.

Again, the star of Venus, being by nature capable of moistening, is even more so in Pisces in which the beginning of the moist spring gives notice¹, and what with increasing its own proper power, it had its exaltation in Pisces and its depression in Virgo.

The star of Hermes is the reverse, reasonably being somewhat more dry² in its opposite [effect] in Virgo wherein the dry autumn gives notice, and it is, as it were, exalted, while in Pisces it is, as it were, depressed.

21. Concerning the Disposition of the Boundaries

Two ways of [disposing] the boundaries are adduced above all. One is the Egyptian way, that which is on the whole related to the proprietary rights of the houses; the other is the Chaldaean way, that which is related to the rulerships of the trigons.

The commonly adduced Egyptian way of disposing the boundaries actually does not preserve quite so well³ an analogy of order or of individual quantity. For firstly, as far as the order is concerned, they have partly given the first places to the rulers of the houses, partly to those of the trigons, and sometimes to those of the exaltations. If they have followed the houses, for example, why have they made the first assignment, say, in Libra to the star of Kronos and not to the star of Aphrodite? And why to the star of Zeus in Aries and not to the star of Ares? Or if they have followed the trigons, why have they made the first assignment in Capricorn to the star of Hermes and not to the star of Aphrodite? Or if they have followed the exaltations, why that in Cancer to the star of Ares and not to the star of Zeus? Or if they have followed the planets having the greatest number of these, why have they made the first assignment in Aquarius to the star of Hermes, which has only a trigon, and not to the star of Kronos? For, Aquarius is the house and trigon of this planet. Or why have they made first assignment in

¹ Spring officially begins when the Sun enters Aries. However, according to chapter 11, Pisces is one of the bicorporeal signs, which share the weather of the signs contiguous to them. Thus, the spring "gives notice" of its imminent arrival when the Sun is in the last part of Pisces.

² *hypoxēros*.

³ as the Chaldean.

Capricorn to the star of Hermes since it does not have any relationship of rulership to this *zōidion* at all? And one ought to find some same analogy in the order of the remainder.

Secondly, the quantity of the boundaries also appears to have nothing analogical about it. For, the number totaled up for each individual star from all the boundaries, in relation to which they say that the temporal quantities of them are distributed, has neither a proper nor an easily demonstrated rationale. And even if we trust this totalled number as being outright agreed upon by the Egyptians, the same number would be found as the total in many ways and by interchanging the quantities differently by *zōidion*. And what some try to argue in a seemingly plausible and subtle manner concerning these things—that the times figured for each star in the ascensional determination of every zone in some way total up to the same quantity—is false. For, in the first place, they follow the common doctrine, the one constructed with even excesses of the ascensions, which is not even close to the truth.¹ According to this doctrine, for the parallel through the lower regions of Egypt, they would have the twelfth-parts Virgo and the Claws² each ascending in $38\frac{1}{3}$ times,³ the twelfth-parts Leo and Scorpio in 35 each, though it is shown through diagrams⁴ that these ascend in more than 35 times while the twelfth-parts Virgo and the Claws⁵ ascend in less.

Then, too, those who have tried to construct such a doctrine seem no longer to have followed the quantity of terms adduced by the majority, nor in the same manner, and to have been forced to falsify many [boundaries] and to even use portions of degrees here and there for the sake of saving what is proposed for them, which, as we have

¹ This is a reference to the systems of ascensions inherited from the Babylonians, System A and System B. These systems made two erroneous assumptions: First, that the ascensions of the opposite signs had to add up to 60°; Second that from the signs of shortest ascension (Aries and Pisces) to the signs of long ascensions (Virgo and Libra), as the ascensions increased from sign to sign (or decreased), they did so by a fixed amount. See my introduction to Vettius Valens, *Anthology*, Book I. [RH]

² Libra. See page 21, note 1. [RH]

³ 'Times' as used in Ptolemy and others are actually degrees passing of the meridian. [RH]

⁴ This usually means through geometrical demonstrations.

⁵ Libra. See page 21, note 1. [RH]

said, are not those being held on the true view.

Nevertheless, the boundaries adduced by many as trustworthy because of immemorial tradition are set down in the following manner.

Boundaries According To The Egyptians

| Aries | | | Taurus | | | Gemini | | | Cancer | | | Leo | | | Virgo | | |
|-------|---|----|---------|---|----|---------|----|----|--------|---|----|--------|---|----|--------|----|----|
| ♈ | 6 | 6 | ♀ | 8 | 8 | ♀ | 6 | 6 | ♂ | 7 | 7 | ♈ | 6 | 6 | ♀ | 7 | 7 |
| ♀ | 6 | 12 | ♀ | 6 | 14 | ♈ | 6 | 12 | ♀ | 6 | 13 | ♀ | 5 | 11 | ♀ | 10 | 17 |
| ♀ | 8 | 20 | ♈ | 8 | 22 | ♀ | 5 | 17 | ♀ | 6 | 19 | ♈ | 7 | 18 | ♈ | 4 | 21 |
| ♂ | 5 | 25 | ♈ | 5 | 27 | ♂ | 7 | 24 | ♈ | 7 | 26 | ♀ | 6 | 24 | ♂ | 7 | 28 |
| ♈ | 5 | 30 | ♂ | 3 | 30 | ♈ | 6 | 30 | ♈ | 4 | 30 | ♂ | 6 | 30 | ♈ | 2 | 30 |
| Libra | | | Scorpio | | | Sagitt. | | | Capri. | | | Aquar. | | | Pisces | | |
| ♈ | 6 | 6 | ♂ | 7 | 7 | ♈ | 12 | 12 | ♀ | 7 | 7 | ♀ | 7 | 7 | ♀ | 12 | 12 |
| ♀ | 8 | 14 | ♀ | 4 | 11 | ♀ | 5 | 17 | ♈ | 7 | 14 | ♀ | 6 | 13 | ♈ | 4 | 16 |
| ♈ | 7 | 21 | ♀ | 8 | 19 | ♀ | 4 | 21 | ♀ | 8 | 22 | ♈ | 7 | 20 | ♀ | 3 | 19 |
| ♀ | 7 | 28 | ♈ | 5 | 24 | ♈ | 5 | 26 | ♈ | 4 | 26 | ♂ | 5 | 25 | ♂ | 9 | 28 |
| ♂ | 2 | 30 | ♈ | 6 | 30 | ♂ | 4 | 30 | ♂ | 4 | 30 | ♈ | 5 | 30 | ♈ | 2 | 30 |

The number of each of these is totalled thus: 57 degrees for Kronos, 79 for Zeus, 66 for Ares, 82 for Aphrodite, 76 for Hermes. Together they come to 360 degrees.

The Chaldaean way has a certain simple and more plausible analogical integrity, though not so self-sufficient in relation to the masterships of the trigons and the order of quantity,¹ so that one can

¹ That is, the order and assignment of the Chaldean boundaries is more artificial.

nevertheless easily impugn them even without a tabulation.¹ For, in the first trigon of Aries and Leo and Sagittarius, which has the same division [into boundaries] for each of these *zōidion*, the ruler of the trigon, the star of Zeus, accepts first of all; then the ruler of the next trigon (I mean the star of Aphrodite); then the ruler of Gemini, the star of Kronos and that of Hermes; finally, the ruler of the remaining trigon, the star of Ares. In the second trigon of Taurus and Virgo and Capricorn, which again has the same division by *zōidion*, the star of Aphrodite accepts first; then the star of Kronos again and that of Hermes; after this the star of Ares; and finally the star of Zeus. This order is all but observed for the remaining two trigons. However, there being two rulers of the same trigon (I mean the star of Kronos and that of Hermes), the star of Kronos appropriately takes the first place of the order by day, while Hermes takes it by night.

Also, the quantity for each boundary happens to be a simple matter. For, in order that the quantity of the terms of each planet should be one degree short of the one assigned ahead of it, in accordance with the reduction of the order from first place, they always gave to the first boundary 8 degrees, to the second 7, to the third 6, to the fourth 5, to the fifth 4, the degrees of the *zōidion* being filled up in this manner. From this, 88 degrees by day are totalled up for the star of Kronos, but 66 by night, 72 to the star of Zeus, 69 to the star of Ares, 75 to the star of Aphrodite, and 66 to the star of Hermes by day, but 78 by night. These come to 360 in all.

Of these boundaries, then, those in the Egyptian manner have more credibility, as we have said, both because in the Egyptian writers their totals have been deemed worth recording as being useful, and because the degrees of the boundaries in the Egyptian arrangement of paradigmatic births are on the whole in accord with them.

Nevertheless, since these writers themselves nowhere make clear the arrangement [of the boundaries] or their number, the lack of agreement among them concerning the order could reasonably be viewed with suspicion and easily criticized.

¹ The significant differences between the Teubner text and Robbins' at this point have led him to a rather different sense here. However, it does seem as if Ptolemy wants to dismiss the Chaldean boundaries out of hand as being not so credible. See the paragraph after the next one.

Before going so far, however,¹ we have happened upon an ancient and much deteriorated manuscript copy containing a natural and harmonious account of the order and number of the boundaries, with the degree-descriptions of the aforesaid births and the number of the totals being found to be in agreement with the record of the ancients. The wording of the book was quite lengthy and with much demonstration of something or other, but hard to make out owing to its deterioration and scarcely capable of tracing out and impressing upon me even its general purport, despite the assistance of a table of the boundaries, which was somewhat better preserved by being placed somewhat nearer the end of the book. The form, then, left by the general impression of them² is as follows.

As for the order according to each twelfth-part, the exaltations and the trigons and the houses are employed. For, in general, the star having two of these rulerships is placed in the front rank in the same *zōidion*, even if it should be malefic. But wherever this does not obtain, the malefics are always placed last, the rulers of the exaltation first, then the rulers of the trigon, then the rulers of the house, then, for the next [boundary rulers], analogously [do the same] in the next *zōidion* in order,³ again with those having two rulerships upward in the next [*zōidion*] being placed ahead of the one having a single rulership in the same *zōidion*.⁴ Nevertheless, since no boundaries are given to the lights,

¹ Connecting the particle *ēdē* with the preceding sentence.

² The metaphor here has to do with affixing a seal to wax. Whereas the text itself made no *impression* on Ptolemy due to its illegibility, the table made this *imprint* on his mind.

³ This phrase and the next one are the keys to understanding how to establish the order of the boundaries after the first, and they have both been mistranslated by Robbins, who does not give enough information in his translation to make the ordering determinant. This phrase simply says that after taking the rulers in the prescribed order for a given *zōidion*, you move on to the next *zōidion* and again consider the exaltation ruler first, then, the trigon ruler, etc.

⁴ This phrase takes care of the only exception to the instructions of the preceding phrase, which occurs in going from Ares to Kronos in Gemini (instead of vice versa). The word 'upward' specifies that this condition obtains only when the planet of double rulership in the next *zōidion* is also upcoming in the order exaltation, trigon, house. This qualification rules out the only other example of a succeeding double rulership—that is, where Kronos is followed

Cancer and Leo, which are houses of the Sun and the Moon, are apportioned to the malefics because of being disadvantaged in the order. Cancer was apportioned to the star of Ares, but Leo to the star of Kronos, in which the order proper to them is preserved.

But for the quantity of the boundaries, as when no star is found with two types of ruler either in the *zōidion* itself or even in the next *zōidia* up to a fourth-part, 7 degrees each are given to the benefics (that is, to the star of Aphrodite and that of Zeus), but 5 degrees each to the malefics (that is, to the star of Kronos and that of Ares), and 6 degrees are given to the star of Hermes, which is common, for a total of 30 degrees. But since indeed there are always some having two relations [of rulership] (for, the star of Venus is made the sole ruler of the trigon of Taurus and Capricorn, since the Moon is not employed for the boundaries), one additional degree is given to each of the planets which are so, whether they are in the *zōidion* itself or in the next *zōidia* up to a quadrant for which the glyphs¹ were lying adjacent.² But the degrees added to the double rulers are subtracted from the remaining single rulers, as for the most part³ from the star of Kronos and then even from Zeus, because their motions are more ponderous. And the exposition of these boundaries is just as follows.

Boundaries According To Ptolemy⁴

by Hermes in Aquarius, instead of Aphrodite.

¹ *stigma*.

² Robbins has some gibberish here about the planets being marked with dots, where it is clear that Ptolemy just wants to specify that the planets are in the same row.

³ Evidently, the quantitative rule proposed by Ptolemy is not totally prescriptive.

⁴ Of the existing translations of Ptolemy into English, this is the first to present Ptolemy's terms based on the authoritative Teubner edition. While the precise number of degrees in each term may not be totally definitive here, the order of the rulers is. This is important because the terms as presented here are almost exactly the same as those used by William Lilly and the other astrologers of 17th Century England. The only difference is in Gemini where Lilly has ♄ 6, ♀ 14, ☿ 21, ♂ 26 and ♃ 30, due to a difference of one degree in the length of the term of ♀. From what we know, the Lilly variant has as much claim to authenticity as the version given in the Teubner text. According to Dr. Lee Lehman, the Ptolemaic terms as given here show promise of being

| Aries | | | Taurus | | | Gemini | | | Cancer | | | Leo | | | Virgo | | |
|-------|---|----|---------|---|----|---------|---|----|--------|---|----|--------|---|----|--------|---|----|
| ♈ | 6 | 6 | ♀ | 8 | 8 | ♀ | 7 | 7 | ♂ | 6 | 6 | ♈ | 6 | 6 | ♀ | 7 | 7 |
| ♀ | 8 | 14 | ♀ | 7 | 15 | ♈ | 6 | 13 | ♈ | 7 | 13 | ♀ | 7 | 13 | ♀ | 6 | 13 |
| ♀ | 7 | 21 | ♈ | 7 | 22 | ♀ | 7 | 20 | ♀ | 7 | 20 | ♀ | 6 | 19 | ♈ | 5 | 18 |
| ♂ | 5 | 26 | ♈ | 4 | 26 | ♂ | 6 | 26 | ♀ | 7 | 27 | ♈ | 6 | 25 | ♈ | 6 | 24 |
| ♈ | 4 | 30 | ♂ | 4 | 30 | ♈ | 4 | 30 | ♈ | 3 | 30 | ♂ | 5 | 30 | ♂ | 6 | 30 |
| Libra | | | Scorpio | | | Sagitt. | | | Capri. | | | Aquar. | | | Pisces | | |
| ♈ | 6 | 6 | ♂ | 6 | 6 | ♈ | 8 | 8 | ♀ | 6 | 6 | ♈ | 6 | 6 | ♀ | 8 | 8 |
| ♀ | 5 | 11 | ♈ | 8 | 14 | ♀ | 6 | 14 | ♀ | 6 | 12 | ♀ | 6 | 12 | ♈ | 6 | 14 |
| ♈ | 8 | 19 | ♀ | 7 | 21 | ♀ | 5 | 19 | ♈ | 7 | 19 | ♀ | 8 | 20 | ♀ | 6 | 20 |
| ♀ | 5 | 24 | ♀ | 6 | 27 | ♈ | 6 | 25 | ♂ | 6 | 25 | ♈ | 5 | 25 | ♂ | 6 | 26 |
| ♂ | 6 | 30 | ♈ | 3 | 30 | ♂ | 5 | 30 | ♈ | 5 | 30 | ♂ | 5 | 30 | ♈ | 4 | 30 |

From the totaling of them are also made 57 degrees for Kronos, 79 for Zeus, 66 for Ares, 82 for Aphrodite, 76 for Hermes. 360 degrees in all.

statistically significant in a sample of New York City suicide cases. See Lee Lehman, *Essential Dignities*, West Chester, PA, Whitford Press, 1989.

Robbins' terms are simply incorrect, probably due to the texts he chose to use. Ashmand and Wilson give the same sets but both have variants for term rulers and the sizes of the terms in several cases. Wilson tries to justify these double sets of rulers on logical grounds, but it is clear that he was simply dealing with a text that preserved multiple traditions. In both the Ashmand and Wilson versions of the terms, the actual set of terms given here is completely presented along with the variants, but the reader has no way of knowing which are the variants and which are the more usual values. [RH]

22. Concerning Places and Degrees of Each *Zōidion*

Some have also divided the rulerships into even finer segments, calling them 'degrees'¹ and 'places.'² And assuming place to be the twelfth-part of a twelfth-part (that is, $2\frac{1}{2}$ degrees), they also give the rulership of it to the *zōidia* in order (and others even in accordance with certain illogical orders). Again, for degree, they give each one from the beginning to each of the stars, following the order of the Chaldaean boundaries. These, then, having a rationale which is merely plausible and not physical, but rather a vain opinion, we will pass by.

But that it is indeed reasonable to start the twelfth-parts and the boundaries from the tropical and equipartite points—that we will not omit, as it happens to be worth dwelling over. This is both because the writers in a certain fashion³ make this clear, and especially because we see from the previous demonstrations that the natures and powers and [planetary] affiliations of the twelfth-parts and boundaries derive their cause from the tropical and equipartite origins and not from any other starting points. For, if other starting points are assumed, we will either be forced no longer to use the natures of the *zōidia* in prognostication, or else, if we use them, we will be forced to make mistakes because of the overlappings and separations of the intervals that secure the powers in them.⁴

¹ *moira*.

² *topos*.

³ *pōs*. Robbins translates this as 'quite,' implying that a commitment to the tropical zodiac was explicit in the earlier writers, whereas in this context it should be translated 'somehow' or 'in a certain fashion,' implying that this is an inference or surmise on Ptolemy's part.

⁴ Robbins translates this pronoun as 'planets,' which is highly unlikely without a nearby antecedent noun. I see no reason why it cannot still be referring to twelfth-parts and boundaries. [Additional by RH] Ptolemy's whole argument is that the qualities of the signs and their subdivisions arise from their connection with the seasons. If we begin the signs at any other points, we cause that connection to be weakened or destroyed, especially if the beginning point is sidereal and subject to precession.

23. Concerning Faces, Chariots, and the Like.

The affiliations of the stars and the twelfth-parts would be more or less like these.¹

But planets are also said to be in their own face² whenever each of them should maintain the very same figuration in relation to the Sun or the Moon that its house has to their houses—whenever, for example, the star of Aphrodite should (for the sake of argument) make a hexagonal interval relative to the lights while being west³ relative to the Sun and east⁴ relative to the Moon, in keeping with their houses from of old.

And the planets are also said to be in their own chariots and

¹ Although Robbins does not make this connection in his translation, Ptolemy is here referring to the faces, chariots, and rejoicings (implied in “the Like”) in the very title of this section. This must be understood in order to comprehend the argumentative structure of this section. According to Antiochus (section 43), “Planets are in their own chariots whenever they should be found in their own house, exaltation, or boundaries. And they rejoice at these places even if they are found under the beams of the Sun.” It is, however, quite a surprise to see ‘face’ listed here as a general term for dignity. Might its later exclusive association with decans be a historical accident?

² *idioprosōpeō*. That is, even though the term ‘face’ is generally synonymous with ‘affiliation’ in the pre-Ptolemaic tradition, it also has the deviant usage that follows. Decanic face as a dignity is conspicuously absent in Ptolemy’s list of dignities, perhaps because of an association which they may have with the extra-zodiacal constellations of the fixed stars, which would be incompatible with Ptolemy’s overall tropical approach.

³ *hesperios*. Robbins has ‘occidental’ here. This would more properly translate the Greek word *dutikos*, which literally has the meaning of ‘pertaining to setting’ and is its semantic equivalent. Temporally speaking, *hesperios* means ‘toward evening;’ spatially, ‘toward the evening regions’—that is, the west. To prevent confusion with the Greek word *dutikos*, we will consistently translate *hesperios* as ‘west.’ Cf. notes to section 24 for ‘occidental’ as a translation of *dutikos*.

⁴ *heōios*. Analogous to the above, Robbins has ‘oriental’ here. This would more properly translate the Greek word *anatolikos*, which literally has the meaning of ‘pertaining to rising’ and is its semantic equivalent. Temporally, *heōios* means ‘in the morning;’ spatially, ‘toward the morning regions’—that is, the east. To prevent confusion with the Greek word *anatolikos*, we will consistently translate *heōios* as ‘east.’ Cf. notes to section 24 for ‘oriental’ as a translation of *anatolikos*.

thrones and the like whenever they should happen to be affiliated with the places in which they are taken in accordance with two or more of the ways set out earlier¹—then especially,² as the power of the planets for actualization increases by means of the similar and cooperative [character] of the kindred³ property of twelfth-parts which contain them.

And they do say that planets rejoice⁴ whenever, even if the affiliation⁵ of the *zōidia* which contain them should not be made with regard to the planets themselves, it is [made] nevertheless with regard to planets of the same sect⁶ (though there is far more sympathy when it *is* so⁷) and they⁸ likewise share in the similitude⁹ even in such a fashion.¹⁰

¹ i.e. dignities. [RH]

² Ptolemy does not say that the term 'chariot' applies only when a planet should have two or more dignities, as the Robbins' translation implies, but that it is a deviant usage of the term, which we know from the Antiochus quotation above was primarily used when the planet had only one of the dignities. Ptolemy may, however, be suggesting that the words 'chariot' and 'throne' apply most naturally to the condition he describes, and that their synonymy with 'affiliation' is more an inexact generalization of that natural meaning. Robbins takes the word 'especially' (*mallon*) with the verb 'increases' and thus misses the structure of the whole argument.

³ *homophulos*. Literally, 'of the same race or stock.'

⁴ *chairō*.

⁵ affiliation = dignity. [RH]

⁶ In other words, a planet which disposes of a certain degree will be dignified if there is another planet in that degree of the same sect. [RH]

⁷ That is, when the affiliation *is* with regard to the planets themselves.

⁸ That is, the planets occupying the dignity of a sect-mate.

⁹ with one of the qualities of the sign. [RH]

¹⁰ Robbins understood this sentence to say that rejoicing was restricted to the situation in which a zodiacal position was not occupied by the planet it dignifies but by one of its sect-mates instead. He then wondered why Vettius Valens (and many others, we might add) had used it in a broader sense to indicate the basic condition of planetary dignity. The point here is that rejoicing was recognized by some of Ptolemy's predecessors *even in this case*, though it occurs to a greater degree when the planet is in its own dignity. However, Ptolemy seems to imply that the term 'rejoice,' in so far as it is the adoption of a similitude through sympathy for an object having that similitude, has more to do with relationships between planets than those between planets and *zōidia*, and may more properly be applied to the condition he describes than the general

Similarly, whenever they should be taken in alien places and in those of the opposite sect, much of their proper power is paralyzed because the mixture from the dissimilar [character] of the containing *zōidia* produces a certain diverse and blended nature.

24. Concerning Applications and Separations and the Other Powers

In general, the preceding planets are said to apply to the following planets, while the following planets are said to separate from the preceding planets, as long as the interval between them should not be great. This obtains whether it occurs bodily or even by one of the accepted figurations, except that for the applications and separations of the bodies themselves, it is also useful to observe their latitudes with regard to admitting only those transits¹ which are found on the same sides of the ecliptic circle. But for the applications and separations by means of the configurations this is superfluous, with all the rays being always carried and similarly meeting from every direction on the same sides, namely toward the center of the earth.

From all these matters it is immediately and easily seen that one must investigate the quality of each of the stars by means of their own individual physical characteristics, and furthermore from the characteristics of the twelfth-parts which contain them, or even from the characteristics of the configurations in relation to the Sun and the angles, in the manner we have set out for these individually.

One must investigate the power of the stars first from their being either oriental² and additive to their own motions³ (for then they are

condition of affiliation. This is all the more likely when we realize that Ptolemy considered the planets to have souls and would therefore be literally capable of sympathy or antipathy for each other (see appendix). However, the relationship between planet and *zōidion* might, then, be better expressed by Ptolemy's word 'affiliation.' Again, there may be a suggestion of terminological revision here. This paragraph is a kind of logical inversion of the preceding one in which he emphasized the greatest range of application of a word; here he emphasizes the least.

¹ *parodos*. That is, one of the bodies passing by the other.

² *anatolikos*. Literally, 'pertaining to the rising places.' Cf. notes to section 23.

especially strong), or occidental¹ and subtractive in their own motions² (for then they have an energy that is weaker). Then, too, from how they relate to the horizon, for when they are culminating or post-ascending the Midheaven, they are especially powerful; but they are second in power whenever they should be on the horizon itself or should be post-ascending. And [with regard to the horizon] they are more powerful whenever they are upon the oriental horizon, but less so whenever they should culminate under the earth or should be configured differently to the rising place; but if they are not so, they happen to be entirely impotent.

End of Book I

³ We are not yet sure whether Ptolemy means direct motion or accelerating motion by this phrase. There also seems to be some confusion in the subsequent tradition.

¹ *duikos*. Literally, 'pertaining to the setting places.' Cf. notes to section 23.

² As with note 2 above, we are not yet sure whether Ptolemy means retrograde motion or decelerating motion by this phrase.

Appendix I

Ptolemy's Hypotheses of the Planets

Book II

[Translator's Note—This little studied writing of Ptolemy attempts to understand the motions of the celestial bodies as all of one piece, rather than relatively and in isolation from each other (as in the *Almagest*). It contains Ptolemy's presentation of the idea of "nested" planetary spheres in which there is no empty and wasted space—all are parts of one continuous etheric body.

The excerpt here translated is of importance for understanding how Ptolemy regarded the workings of the ether and the transmission of the planetary impulses through it. This is only suggested in section 2 of the *Tetrabiblos* itself. It is remarkable for its doctrine that the planets have souls, with the planetary motions originating from the life force of the planets themselves. This is directly contrary to the Aristotelian doctrine that motion was communicated by contact from the outer celestial sphere inward. For Ptolemy, the motive impulse works from the inside outward. Furthermore, the planets voluntarily coordinate their own motions with one another as though in a cosmic dance. There is also the hint that the etheric element in man, which is the seat of his intellectual activity and his sparks of thought, is capable of "turning" his body in much the same way that the etheric element in the heavens, and the ray-emanating planets therein, "turns" the sublunary sphere.

The work survives only partly in Greek, but entirely in Arabic translation. Unfortunately, the portion we are presently interested in survives only in Arabic, and we have made a provisional translation of it from a German translation of the Arabic, so we are quite far removed from the original Greek text. Later, we hope to translate the entire work directly from Greek and Arabic.]

We have for the most part set forth the relationships of the motions of the spheres that have been established through observations that reach up to our own day. However, as we have given the examples for their motions and the intervals of their arrangement in simple ways in the greatest circles that they describe in their motions, it still remains for us to describe the forms of the bodies in which we conceive those spheres; in addition, we stick to that which is suitable to the nature of spherical bodies and that which necessarily befits the principles which are appropriate to the eternally immutable essence.

Now, as for what pertains to the enumeration of the views of the ancients and their teachings on these matters, as well as the correction of the mistakes encountered therein, this is not our present business, because those are things already assumed by people who want to judge what is only presented as a hypothesis according to the things that really are, and according to that which is correct and established, as far as it fits the method that we have taken for the eternal, rotating motion.

But as for what pertains to the conditions of the bodies in which the aforesaid [motion] is found and their reciprocal relationship, we now want to explain that here, after we have first distinguished and premised the general phenomena that commonly make an appearance with them in a physical-mathematical respect.

The physical view, now, leads us to maintain that the etheric bodies admit no influences and do not alter—if they indeed in the whole time are ever different from each other—in conformity with that which befits their wondrous essence,¹ and with its resemblance to the power of the stars that exist in those etheric bodies, whose rays penetrate unhindered and uninfluenced all the things scattered around in them. Furthermore, it brings us to the claim that the etheric bodies never alter (which we have already said), that is, that their forms are round and their actualities are the actualities of things that are similar to each other in their parts. For every one of these motions that differ in quantity or in kind, there is a body which moves around poles, in time and place, that are proper to it, with its own proper motion and in conformity with the power of every single star. From this body the beginning of the motion takes place, originating from its principal powers, which are equivalent to the powers present in us, and which move bodies of the same kind as it, which are similar to the parts of a whole animal, according to the relationships that are suitable to every single one of them. And indeed, with these bodies this happens without coercion or power to constrain them from without; for, there is nothing stronger than that which admits of no influence that could constrain it.

Also, on account of the behavior of a naturally ponderous and not independent motion, this motion of etheric bodies is not equivalent to the phenomena in such bodies which in the state of their natural motion rise and fall.² Because firstly, these latter motions are by nature not proper to bodies that move in substances like themselves; on the

¹ This tells us in no uncertain terms that “essential dignities” are not truly essential at all according to Ptolemy, because the true essence of planets is etheric and therefore unchanging. And being etheric they are composed of the substance of the higher mind, that, *nous*. This position is not peculiar to Ptolemy. [RH]

² This refers to bodies which are not etheric, that is, composed of the four lower elements, fire, air, water and earth. Etheric bodies move in circles; elemental bodies rise or fall to their natural positions. [RH]

contrary, every one of them stands still and rests if it comes to be in some substance that is related to it. But if it is brought into something that is not similar and not related to it, and the impediments are removed, then it strives to its own proper place.¹

Further, if this entire assumed substance is animated, then it is exempt from the corporeal motion, that is, from that which takes place in a straight direction and in a changeable manner, and there dwells in it the uniformly rotating motion in all its purity with absolute self-determination, for which there is no impediment, as is befitting the wondrous understanding and the unimpeded will. For it there is no fluctuation, and no alteration of intention is met with, as long as that one motion has such an ordering that it exists in opposition to the three spatial directions.

As regards the mathematical view, one finds that application of the things described and in their connection with every single one of the motions that show themselves to us is possible in two ways. In the first way, one prescribes a complete sphere for every motion, either hollow, as in the case of spheres that enclose on another or the earth; or dense, not hollow, as those which move the stars and are called epicycles. In the other way, one does not postulate an entire sphere, but rather only a piece of one, lying on both sides of the greatest of the circles found on that sphere (namely, the circle on which the longitudinal motion is completed), and with the portion enclosing this circle on both sides corresponding to the amount of latitude. Accordingly, if this piece is taken from an epicycle, its form is similar to a tambourine, but if it is taken from a hollow sphere, it is similar to a girdle or to a ring or a flywheel, as Plato says. The mathematical consideration proves that there is no difference between the two types described; for, the motions that are assumed for complete spheres can, when combined in this manner and compared with the motions of the said truncated pieces, be brought into agreement with them, on account of the similarity of the motions in relation to the appearances.

Now, those men who started off their comparison with the spherical motions as we look upon them, led the acceptance of the complete sphere back to a physical observation; for, they have seen that in the

¹ Only etheric bodies move within their own element, in circles. Elemental bodies come to a state of rest when they come to their own proper place in the cosmos. [RH]

spheres that we construct, the spherical motion necessarily has two points that touch the sphere, namely, the so-called poles, and one surmised the same things in the adoption of the truncated pieces. In the complete sphere it is self-evident. They base themselves, then, as Aristotle did, on the claim that the poles of the enclosed spheres are attached to the encompassing spheres. However, as no connection remains between the inner spheres and the first exterior sphere, the motion of all the spheres is also not uniformly fast, but rather different in diverse fashions, so they were constrained to seek an understanding of the type in which every single star moves with the primary motion (as we observe them to move and as they show themselves to us) because the spheres that are between us and them are different in their position and in their motion. For this reason, Aristotle used motions which are similar to being unwound.

It is not necessary, however, for us to ascribe things to the etheric bodies that we necessarily accept in the bodies present to us, and we do not need to think that something corresponding to that which hinders objects present to us also hinders the celestial nature, which is so entirely different from them in essence and activity. Furthermore, we do not find that the poles that we know of are the first causes for the motion of rotation; for, there is no difficulty in accepting that the spheres move in another manner—say, like the spheres that rotate without being supported on one and the same external object. The poles, therefore, do not effect the motion in the place proper to them, but rather they only bear the weight of the spheres. Also, those points are not causes of the origin of motion (because it is not possible that an object at rest should be the cause of a motion), but rather the cause is always something other than these points.

If we also conceive of a sphere that does not move itself and that is not driven by nature or by an object surrounding it of like nature, then for this we also need no poles, neither for the motion of the spheres nor for the fact that they rotate and return back to the same place. Further, if the spheres had the beginning of their motion out of themselves, then the claim that they are supported on something else without this being in their interior is a claim that one must find laughable. This is the same case as in the motion of the spheres of the whole world; for, the inner is here the origin. The inner is either that which is inner; then, because it is that which is inner in essence, the motion also happens in relation to it and through it. Or else, it is the origin, so that, because it is the origin of this eternal and rotating

motion, it is also that whence it comes. For, in both cases the ground is this: that the moving power is immutable and one and the same. Not only this, but even if the distances are equal in both the directions according to which the things go, as in hovering things, then they act one and the same in the equality of inclination if their distance from the places toward which they tend is one and the same.

In short, if it is hard to conceive that the celestial motions do not happen around fixed poles, then one must realize that it is even harder to imagine the type of these poles, and how the extended surfaces of the spheres standing in external connection therewith are bound on and pull the spheres enclosed therein, and by what means these poles obtain their connection with every single one of them. For, if we affix them as points, then we bind bodies to things that are not bodies at all, and bring things that have such and such a magnitude and power together with something that has no magnitude and is nothing at all. But if we affix them as bodies, and if these bodies are similar to wooden pegs or to our lugs, and if they are not different and not contrary to the things that are fastened around them, which we can observe, then we can ascribe these properties of theirs to no nature. However, if they are opposed to that which exists around them, say, through the density that is found in the pegs that are in wood, then we must accordingly absolutely deny the property of remaining in their places, because the denser bodies become, the more they sink in relation to those of greater fineness, and strive toward the midpoint of the world.

But if the stars are ensouled and move themselves voluntarily, and if voluntary motion is also the cause for the fact that, of the kinds of animals, birds have a power by means of which they move themselves and circle in the heights above though they are contrary to their surroundings in regard to density, then we may not suppose that the stars are contrary to their surroundings in their density, but are only different in the power that maintains the rays in them, just as the clouds are also contrary to the air surrounding them only in their color (as long as they remain dry), and as colored fluidities are [not] different in density from other uncolored fluidities if those fluidities are similar to one another in density.

But if we admit that the poles can stand fast, then to what spheres are the poles of both those conjoined spheres attached? For, it is impossible that they are attached to both at the same time on account of the state of the motion. But if they are not attached to one, then they are attached to this without being fixed to another. And which of the

poles is it, then, that moves the free sphere in it? Therefore, here we also find ourselves in an embarrassment.

If, now, a friend of natural philosophy says that the cause of the stationing of bodies that move themselves is one or the other of the mentioned kinds, then that introduces no distinction and no difference (I mean, whether he says that the cause for that is the whole spheres or the pieces that are in between in them), just as little as there exists a difference on the ground that a sphere that excludes another is hollow, and is one not hollow.

The friend of natural philosophy could also say, if he wants, that it happens through the kind of the motion that takes place for pieces that resemble rings or tambourines, on many grounds. In the first place because the celestial bodies do not have many motions on account of the behavior of the spheres which turn one another, as it is quite possible to imagine that this occurs with just a few motions. For, in all spherical bodies of the truncated type, the motion, which is a turning one, is like the motion of the ether, which goes forth in its primary motion since nothing hinders it therein, so that the ether sets it in motion through its own rotation and through the power inherent in it for its own proper motions, as happens with things that move with a single motion, while this is opposed in many ways in spite of those motions, or as things that swim in the flowing water.

Furthermore, it is not appropriate to think that there could be something present in nature which would be senseless and useless—namely, the complete spheres in the motions, when it would suffice that they took place with a small portion of the same—which is exactly the same as with the sphere that properly moves its stars in its totality, namely the sphere of the fixed stars, about which one is required to maintain this on account of that which is observed of their relationship, while we are not required to maintain the same for other objects.

For the same reason we have seen that Hermes and Aphrodite are not placed above the Sun, but rather between the Sun and the Moon so that this should not, according to appearance and according to the demonstrated intervals, leave empty a large space, as though nature had forgotten it and left it so that it was not used, while it is in fact capable of holding the distances of both of those planets which are nearer the earth than the others, so that this space is filled up by means of these two alone.

This same senselessness and absurdity also results for the spheres which roll around each other, quite apart from the mighty increase in

their numbers; for, they take up a large space in the ether, and are not necessary for the motions that the stars display, but on the contrary they roll around together in a single direction so that a single motion arises therefrom. The most astonishing thing here, however, is that the last spheres allow the first spheres to move them, and the enclosed spheres the spheres enclosing them, the multiply-anomalous¹ the simple, quite in contradiction to natural doctrine.

Furthermore, the motions of all spheres proceed from every single sphere that is above them, together with their own proper motion. Therefore, they move not only with the motions proper to them, but rather even with alien motions that do not belong to them. Which of the motions proper to Kronos does one also find for Zeus? Or, to name even more mutually exclusive planets, which motion proper to Kronos does the Moon possess?

Furthermore, there is no possibility of finding the power that moves the first of the spheres rolling and running around each other in the arrangement of spheres; for, the beginning of the motion, which proceeds from the stars, spreads out through connection so that in the greatest of its distances it moves the things proper to it from outside, without having connection with the first of the spheres under the stars that turn around each other. If this beginning were to reach the last sphere around which it turns, then this does not agree with regard to its motion being similar to the primary motion; but rather, the matter is the other way round, because the beginning moves in it, although no cause is found for this property through which the beginning of this motion can arise, as this cannot be shown for the sphere that turns with the beginning motion.

If someone now imagines that the earth and the air are turned with the turning of that which surrounds them both, and that it compels them both to movement, and if one takes the birds we perceive as an example of the things present in the heavens (and such comparisons are naturally not unfamiliar)—as it is the case with the birds among the animals familiar to us, that if they move themselves with their own proper motion, the origin of that motion is in the life force lying within them, then an impulse arises from this life force, which next draws into the muscles, then from the muscles into the feet (for example) or into the fore-feet (that is, the wings), and here comes to an end; and these things

¹ i.e. that which is anomalous in many ways. [RH]

complete the transfer of motion from one to the other without their own motions having to agree with the motions of things that are between them, nor do their motions have to agree with the motions of the things surrounding them; and there is no compelling reason to accept that the motions of all or most birds happen through their contact with each other, but rather the necessary requirement holds directly that they indeed do not touch one another if we do not want one of them to hinder the other—so we may conceive things in just the same manner in the case of the celestial motions, and hold the view that every star has a life force in its essence and moves itself, and lends a motion to the bodies which are united to it through their nature, the source for this motion always being in the one located beside to it, and its propagation occurring to the one ajoined[4] thereto, just as the star itself has first given the motion to the epicycle, then to the eccentric circle, then to the circle whose center is the center of the world. At the same time, however, this motion that the life force imparts is different in different places; for, the power of the understanding in us is not the same as the power of the impulse itself, and this again is not the same as the power of the muscles, nor this the same as the power of the feet; but rather, they are in a certain regard different in their inclination toward the outside.

Now, as for the generally turning motion of the ether, it stands in contact with all substances separated by it; however, it does not agree with the motions peculiar to those separated by it, nor do they agree with it in its primary turning motion. But the bodies that are allotted to each single one of the stars assumes, on its own account and on the account of the stars alone only, only a position vis-a-vis the ether at which it is possible to receive that motion up above, and the ether sets it turning because its place is in the same ether.

As concerns the parts of these bodies, they are free and loose in order to shift and to rotate in one place in the totality of that body in manifold ways and in branchings of many kinds, except that their motion is a uniformly turning one—just as with the circle of hands bound in dance or the circle of people who execute military drill, in that each supports the other in the maneuvers and they bind their strengths together without their bodies coming together, so that their bodies do not hinder them from acting, nor are the bodies hindered from acting by them. . . .

Appendix II

Translation Conventions

The following words consistently translate the indicated Greek word.

ruler, rulership: *oikodespotēs, oikodespoteia*

ruler: *kurios*

master, mastership: *despotēs, despoteia*

-lord: *-kratōr* (as in *horatokratōr*, lord of boundaries)

-steward: *-dektōr* (as in *oikodektōr*, steward of the house)

zōidion: *zōidion* (See **General Notes** in Paulus Alexandrinus and Vettius Valens Book I.)

place: *topos* (See **General Note** in Paulus Alexandrinus.)

sect: *hairesis*

boundaries: *horia*

face: *prosōpon*

trigon: *trigōnon*, i.e., triplicity.

house: *oikos*

kinship, familiarity, congeniality: *oikeiōsis*.

affiliation: *sunoikeiōsis*.

dwelling: *oikotēr*

exaltation: *hupsōma*

depression: *tapeinōma*

figure: *schēma*

figuration: *schēmatismos*

configuration: *suschēmatismos*

to figure: *schēmatizō*

to configure: *suschēmatizō*

to come to the attention of (by application, etc): *hupodedeiktai*

superiority: *kathuperterēsis*

east: *heōios* (also sometimes translated as 'morning')

west: *hesperios* (also sometimes translated as 'evening')

oriental: *anatolikos*

orient: *anatolē* (sometimes in plural)

occidental: *dutikos*

occident: *dusmos* (sometimes in plural)

to contemplate: *theōreō*

to regard: *epitheōreō*

to scrutinize: *katopteuō*

to testify or bear witness to: *epimarturō*

All four of the above words appear to refer to aspect relationships. The words *theoreō* and *katopteuō* refer to aspects in either direction, i.e., into preceding and succeeding signs. However, *katopteuō* seems to have a negative overtone suggesting that it refers particularly to difficult aspects. The word *epitheoreō* is limited to aspects into the succeeding signs but, like *theoreō*, can refer to both difficult and good aspects.

hōroskopos: *hōroskopos*

to mark the birth-hour: *horoskōpeō*

to divide the hour: *Hōronomeō* See the **General Note** to the Anonymous.

midheaven: *mesouranema*

to culminate: *mesouraneō*

pivot: *kentron*

pre-ascension: *proanophora*

post-ascension: *epanophora*

decline: *apoklima*

rise: *anatellō*

arise: *epitellō*

set: *duneō*

hide: *kruptō*

co-rise: *paranatellō* See **General Note** in the Anonymous.

ascend, (of nodes): *anabibazō*

descend, (of nodes): *katabibazō*

contact: *kollēsis*

application: *sunaphē*

separation: *apporoia*

circumambulation: *peripatos*

degree: *moira* (See **General Notes** in Paulus Alexandrinus and Vettius Valens Book I.)

monomoiria: *monomoiria* (See the sections in Paulus Alexandrinus on *monomoiria*.)

crisis: *klimaktēr*

to take delight in, rejoice: *chairō*

to have dealings with: *chrēmatisō*

Such dealings evidently include any or all of the administrative or governing functions (i.e., dispositions) performed by the planetary ruler, master, lord or steward. Possibly the planet's role as spear bearer, and any configuration it enters into.

illustration: *hupodeigma*

A somewhat irregular word for 'example', that has just a trace of 'sign' or 'token.'

image: *eikōn*

Another irregular word for example that may have the sense of a visualization.

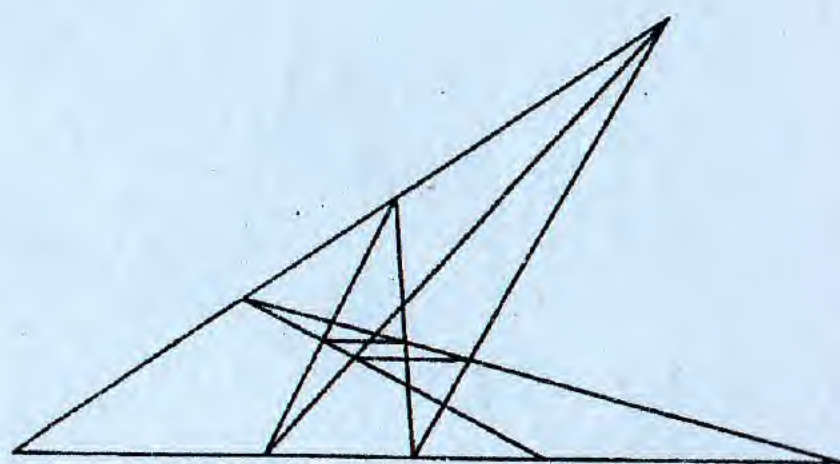
occupancy: *Epochē* See the **General Note** in the Anonymous.

under bond: *sundesmos*.

Literally, that which ties together. Evidently a more general kind of connection than conjunction (*sunodos*). See Paulus, Chapter 35.

commencement: *katarchē*

beginning: *archē*



The Golden Hind Press